FINANCIAL TIMES

PUBLISHED IN LONDON AND FRANKFURT
No. 28,181 Monday June 2 1980 ***20p
CONTINENTAL SELLING PRICES: AUSTRIA Sch 15; BELGIUM Fr 28; DENMARK Kr 5.00; FRANCE Fr 4; GERMANY DM 2.0; ITALY L 700; NETHERLANDS Fl 2.0; NORWAY Kr 5.00; PORTUGAL Esc 35; SPAIN Pta 70; SWEDEN Kr 5.00; SWITZERLAND Fr 2.0; EIRE 20p; MALTA 20c

NEWS SUMMARY

GENERAL

Mideast veto threat by Carter

President Carter last night threatened to veto in the UN Security Council any Middle East initiative by Western Europe because it would undermine the peace process started by the 1978 Camp David accords.

But the President coupled his outspoken warning, made in a television interview, with the hope that such a clash with Western allies could be avoided. Back Page

In Damascus, the largest Palestinian group El Fatah ended its ten-day congress with a call to intensify the armed struggle against Israel. Page 2

Gandhi set to win

Indian Prime Minister Indira Gandhi's Congress (I) Party was poised for sweeping victories in state elections which have cost 54 lives in political violence. Page 2

Cossiga pressure

Pressure on Italian Prime Minister Francesco Cossiga is intensifying and may yet lead to his resignation although he has been cleared of allegations of helping a terrorist suspect escape arrest. Back Page; Italian economy, Page 2

Callaghan happy

Labour leader James Callaghan said the party's special one-day conference was "well worthwhile." Others believe it may have signalled a turning point in the Right's fight to regain control of the party. Back and Page 6; Politics Today, Page 18

Irish flights hit

Aer Lingus, the Irish airline, had to cancel half its flights between the UK, Ireland and North America because of a strike by Irish airport workers.

Police raids

Police said a major pornography ring was smashed at the weekend after raids in the South-east netted £300,000 worth of books, films and tapes.

Rebellion talks

British and French Ministers meet in Paris today to discuss ways of ending the rebellion on the island of Espiritu Santo in the Anglo - French New Hebrides. Page 2

Bond Street blast

Scotland Yard's anti-terrorist squad sifted through the wreckage left by the bomb blast at the Kuwait oil company's offices in New Bond Street, London. In Brussels, a bomb exploded in the grounds of the Saudi Arabian embassy.

Coral charges

Three more Coral Leisure Group casino employees and three former employees have been charged with offences under the gaming and theft Acts. In all, 32 have been charged since police raided the group's London casinos last November.

Grave business

Tour of a graveyard is just one of several attractions devised by Merseyside City Council to draw thousands of holiday-makers to Liverpool.

Briefly . . .

Weekly £100,000 premium bond prize was won by No. 1SL 917647 (Oxfordshire) and the £50,000 prize by No. 22RK 845275 (Gwynedd).

East German border guards seized a West Berlin boy who scrambled over the Berlin Wall to recover his football.

BUSINESS

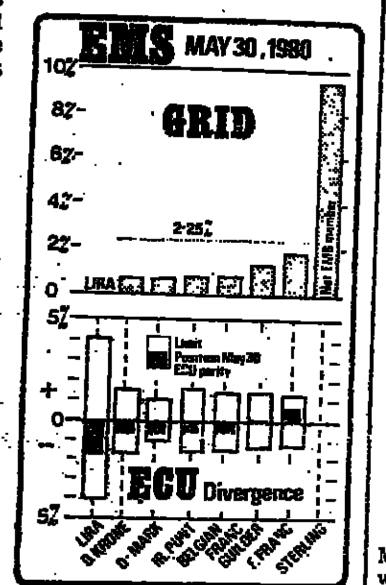
Barclays urges early cut in MLR

● BARCLAYS BANK has renewed its pressure on the Government for an early cut in interest rates, warning that it could otherwise lead to an unprecedented monetary tightness. Back Page

● PAY RISES in leading Western industrialised countries, except the U.S. and Canada, are keeping pace with or even exceeding inflation, says an OECD survey. Back Page

● EUROPEAN Monetary System saw little change last week, with the French franc retaining its place as the most improved currency from central rates despite an easier tendency in domestic interest rates.

The Dutch guilder was again the second most improved currency, followed by the Belgian franc which rose above the Irish punt. The Danish krone was generally weak, but the Italian lira was the weakest, although it remained well within its maximum permitted divergence.



The charts show the two constraints on European Monetary System exchange rates. The upper grid, based on the weakest currency in the system, defines the cross rates from which no currency (except the lira) may move more than 2¼ per cent. The lower chart gives each currency's divergence from its "central rate" against the European Currency Unit (ECU), itself a basket of European currencies.

● NIPPON ELECTRIC Corporation, the Japanese electronics group, will decide by the end of July whether to locate its £20m microchip plant in Dublin or in Livingstone New Town, Scotland. Back Page

● BRITISH concern over the number of subsidised Greek merchant ships will be raised by Mr. Norman Tebbit, Trade Under-Secretary, when he visits Greece this week. Page 4

● TUC is likely to use firm pressure on the electricians' and engineering workers' unions to relax their stand in the dispute over laggers at the Isle of Grain power station site in Kent. Page 8

● OIL COMPANIES in the UK sector of the North Sea could be employing 11,000 - 13,000 workers by 1987, compared with about 8,600 at present, says a survey. Page 4

COMPANIES

● SOUTH WEST Consolidated Minerals, the wholly-owned subsidiary of Dundonian, is offering 5.5m shares at 50p each to raise £2.75m for mineral exploration and development in south-west England. Page 20; Analysis, Page 6; Lex, Back Page

● S. PEARSON and Sons' £24m purchase of Fairey Holdings from the National Enterprise Board will not be completed until the Fairey management makes a new forecast of current year profits. Page 20

Bonn 'cannot find cash' to pay for EEC budget deal

BY JONATHAN CARR IN BONN

HERR HANS MATTHOEFER, the West German Finance Minister, has warned that he does not see where Bonn can find the money to pay for its share of the deal to solve Britain's EEC budget problem.

In a statement yesterday Herr Matthoefer said he was determined not to increase state borrowing and he claimed he could not identify possible savings elsewhere.

On Wednesday the Bonn Cabinet is to discuss last week's EEC agreement and the Finance Minister has the right of veto. Herr Matthoefer's statement came as sharp discord between the Government coalition partners emerged over the Brussels deal.

While leading members of the liberal Free Democrat Party, including Herr Hans-Dietrich Genscher, the Foreign Minister, supported the agreement, senior Social Democrats said the bill Bonn would have to pay was too high.

Herr Matthoefer, a Social Democrat, warned that those Ministers who agreed with the Brussels compromise — which will cost West Germany an extra DM2.6bn (£623m) in 1980 and 1981 together—would simultaneously have to say where the extra finance was to come from.

He noted that a West German supplementary budget for 1980 of nearly DM 2bn had recently been approved, involving heavy cuts in the sums allotted to several Ministries.

Herr Matthoefer has, in effect, tossed the ball back into the court of his Cabinet colleagues—including those members of the FDP who, like Herr Genscher, are describing the Brussels accord as a "victory for Europe."

He is not wholly ruling out approval of the package, despite earlier suggestions this weekend from the SPD that this was so.

He is insisting not only on cuts but on a clear statement of the will to reform the costly Common Agriculture Policy — a direct challenge to Herr Josef Ertl, the FDP Farm Minister.

Tempers in the coalition rose sharply on Saturday after Herr Herbert Wehner, the SPD's powerful Parliamentary floor leader indicated that Herr Matthoefer had rejected the Brussels accord. Herr Wehner said German action for European unity was one thing but to be "milked like a cow" was another.

In a sharp reaction, Herr Genscher said the ability of the Community to act together at a time of international tension was at stake.

Count Otto Lambsdorff, the Free Democratic Economics Minister, ridiculed SPD tactics in speaking out on the budget before it became clear whether the British Cabinet would accept the Brussels compromise.

Herr Matthoefer . . . no extra borrowing

These exchanges bear all the signs of the campaign for the General Election in October, with the FDP seeking to project itself as an independent force and the SPD showing how careful it is being with taxpayers' money.

They also reflect a genuine division of view on the British budget issue within the West German Government.

Editorial comment Page 18

Most Tory MPs to back Mrs. Thatcher's tactics

BY RICHARD EVANS, LOBBY EDITOR

MRS. MARGARET THATCHER will receive overwhelming support from Conservative MPs in the Commons following the expected decision by the Cabinet today to endorse the budget settlement.

The agreement, although it falls some way short of Mrs. Thatcher's original demands for broad balance in Britain's contributions and receipts, is regarded by Ministers as the best deal that could be obtained and appreciably better than most had expected after the sour end to the Luxembourg summit.

British officials insisted last night that the complex proposals were still being scrutinised by Ministers, and minds were not yet made up. But no one thought there was a serious prospect of rejection.

The agreement will be widely regarded as another triumph for Mrs. Thatcher and Lord Carrington, the Foreign Secretary, and a vindication of the brutal negotiating tactics that took the EEC to the brink of collapse.

Mrs. Thatcher is not expected to announce the Cabinet decision personally. This will be left to Lord Carrington in the Lords and Sir Ian Gilmour, his deputy, in the Commons. There will also be a Commons statement from Mr. Peter Walker, the Minister of Agriculture, on the results of his Brussels negotiations.

There is certain to be severe criticism from Labour leaders at the failure to obtain the full £1bn refund and at the decision to allow the 5 per cent increase in EEC farm prices, but the significant factor domestically will be the degree of enthusiasm for the deal within the Government and the Conservative Party.

The issue of Britain's budget contribution which has so damaged relations with other members of the Community, has also threatened to divide the Tory Party with its recent history of strong support for British membership. There have been ominous signs of discomfort among some pro-market MPs at Mrs. Thatcher's uncompromising negotiating tactics.

The scale of her success will now be welcomed by both pro and anti-Marketeers but there are already signs of anxiety at the three-year time scale of the agreement. Mrs. Thatcher's intention had been to reach a permanent solution in order to take the issue of the Market out of UK politics, but this has not been done.

The underlying difficulty of the Common Agricultural Policy remains to be tackled, and Tory Party tacticians are alarmed at the prospect of further bruising negotiations in 1983, probably within about a year of a General Election.

The Labour Party could be poised to take maximum political advantage of the unpopularity of EEC membership at a time when it could be difficult for Mrs. Thatcher to match their demands.

There is no reason to suppose that the trend towards a policy of withdrawal within the Labour Party will be halted or slowed by the Budget agreement, which many Labour politicians regard as a sell-out. It was significant, however, that Mr. James Callaghan, the Labour leader, did not take the opportunity to attack the deal when he addressed the special Labour Party conference at Wembley on Saturday.

Mr. Peter Shore, shadow Foreign Secretary, forecast yesterday that the issue of the Common Market could feature prominently at the next election because nothing had been agreed beyond 1982.

"We will be right back with Britain, again the supplicant, trying to arrest payments which will then be running at some £1.5bn a year," he said.

There is no suggestion that an EEC Budget agreement will produce a "windfall" for either the taxpayer or consumer. Any cash saved would simply be allocated to reducing public borrowing, one of the Government's over-riding economic priorities.

First competitive practice inquiries are delayed

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

THE FIRST batch of investigations into anti-competitive practices by individual companies, which were expected to have been announced this week, have now been delayed for at least another four weeks.

The main reason for the delay is problems over drafting the enabling Orders which bring into force the main sections of the Competition Act, which became law at the beginning of April.

But there is also speculation that the Government may be deliberately dragging its feet over bringing in the new and wide-ranging powers because of pressure from some Ministers.

It is argued that the new investigations into companies' competitive behaviour may impose too great a burden at a time when industry is facing an economic recession.

The new Competition Act gives the Office of Fair Trading the power to investigate any anti-competitive practice carried out by a single company.

The office can then refer the practice to the Monopolies and Mergers Commission for a six-month formal investigation. The Secretary for Trade then has the power to force companies to implement the commission's recommendations.

These new competition powers were one of the first major moves announced by the Government after the General Election last year. In spite of the fact that the legislation was originally kept to only 13 short clauses so it could be speedily introduced, the Competition Bill did not become law until early April this year.

It was then announced that no investigation into individual companies would be started until certain enabling Orders had been drafted and laid before Parliament. This was expected to happen this week.

However, these Orders, which had been expected to be merely a formality, are now taking considerably longer to draft.

It is understood, for example, that there is disagreement over defining the turnover criteria used in the new laws in spite of the fact that this is a relatively standard definition in existing competition legislation.

The Government, however, has not so far hesitated to use the new Competition Act to announce investigations into three public sector bodies. These are British Rail's commuter services in the South-east, the Severn-Trent Water Authority, and the Central Electricity Generating Board.

Under the new Act, the Trade Secretary can refer such public bodies directly to the Monopolies Commission while private sector investigations, referred by the OFT, needs the sanction of the enabling Orders.

The OFT is already reviewing a number of potential cases for investigation, covering such areas as the car industry, milk marketing, and retail opticians.

It is also likely to investigate allegations by some retailers of manufacturers refusing to supply them with goods because of their cut-price policies.

FT SURVEY OF BUSINESS OPINION

Further industrial job loss predicted

By David Marsh

HIGH WAGE costs and the deepening recession will force British industry to make substantial cuts in its workforce over the next 12 months.

The prospect of a further rapid rise in unemployment, together with continuing pessimism in the corporate sector over the outlook for orders, output and export sales, are the main features of the latest Financial Times Survey of Business Opinion published this morning.

With high interest rates and a strong pound still major factors depressing confidence, companies have been cutting stock levels in line with the expected reduction in demand.

However, destocking may continue in coming months.

The index of optimism about general prospects rose slightly for the second successive month.

This was because one of the sectors surveyed last month—the electrical engineering industry—was somewhat more confident that increased defence spending would boost orders.

The other two groups surveyed—stores and consumer services, and consumer durables—were more pessimistic about the outlook.

Output

Despite the rally of the last two months, the index of optimism remains around its lowest for more than four years.

Companies reported that the order picture remained sluggish, and there was a further fall in their assessment of output levels during the next 12 months.

Lack of demand and high wage costs were the main factors behind companies' plans to cut staff. The index covering expected labour requirements, which was already severely depressed, fell sharply to a record low.

The groups surveyed expected hourly wage rates to increase by around 17½ per cent during the next 12 months.

Other costs are expected to rise less steeply, but a build-up in inflationary pressures is indicated by a fresh rise to just over 14 per cent in the expected level of price increases during the next 12 months.

Details Page 8

Recession is serious, says Carter

BY DAVID BUCHAN IN WASHINGTON

PRESIDENT CARTER conceded yesterday that recession had come to the U.S. "quicker and steeper than we thought," but said that inflation and interest rates were falling and that this would help recovery. Government strategy had not changed, he said.

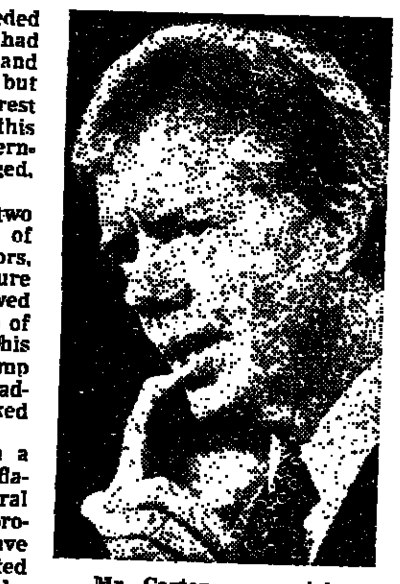
Mr. Carter was speaking two days after the U.S. index of leading economic indicators, designed as a measure of future trends in the economy, showed its biggest-ever monthly drop of 4.8 per cent for April. With this and other evidence of a slump in economic activity, he admitted that the recession looked "serious."

But this should not mean a change in the basic anti-inflation strategy. The Federal Government had enough programmes, or would have enough if Congress adopted recent presidential proposals, to help the poor weather the hardships of a recession. Mr. Carter mentioned subsidies to build low-income housing, job creation, and extra aid for laid-off car workers.

The Government is being closely watched by political and financial analysts for signs that it is diluting its counter-inflation strategy in the face of a recession more serious than expected, and boding little good for the President's re-election this November.

In these early days of recession, Mr. Carter has so far eschewed any major plan to buoy up or stimulate the economy. A tax cut was out of the question this year, he said, but if the recession proves worse than anticipated, preparations for a tax reduction in 1981 could be made.

Mr. Ronald Reagan, the President's probable Republican challenger, is sure to hound Mr. Carter for his stewardship of the economy. In these circumstances, the Government may find it hard to resist the political temptation to undertake some pump-priming economic measures.



Mr. Carter . . . quicker and steeper

Inflation strategy in the industrialised world will figure high on the Venice economic summit's agenda later this month, and one of the benefits the Administration hopes to reap from that meeting is the demonstration to the U.S. public that inflation is common to all Western countries, who all agree it must be curbed before sound growth can begin again.

CC 23 CARTE R—5

Mr. Carter made clear his faith in "the corrective forces built into" the U.S. economy, which were already operating to ensure that the slump would be relatively shortlived. Interest rates were falling fast, and this would soon mean a pick-up in demand for houses and cars, the two hardest hit sectors.

The President said he could virtually guarantee that the fall in interest rates would soon bring the general inflation rate down.

Lombard: U.S. Thatcherite experiment, Page 16

Oil import fee problems

PRESIDENT CARTER faces considerable problems—some of his own making—in getting through Congress a revised budget and his plan for an oil import fee. He has enraged many Capitol Hill leaders by backing a successful revolt in the House of Representatives last Thursday against the 1980-81 budget resolution. Angry Senators are now threatened to vote down his oil import fee.

The President may have to go to the Venice summit with a large hole punched in his energy policy by Congress refusing to approve the oil import fee.

Opposition to the fee, which would be felt by U.S. consumers as a 10 cents a gallon tax increase on petrol, has been building up in recent weeks and is now intertwined with Mr. Carter's difficulties with Congress over the 1980-81 budget. budget.

CONTENTS

For latest Share Index 'phone 01-246 8026

Mrs. Gandhi poised for election victory

BY K. K. SHARMA IN NEW DELHI

MRS. INDIRA GANDHI's Congress (I) Party was poised for sweeping victories in almost all the nine states where elections were held last week. Early results yesterday indicated Mrs. Gandhi's party was winning in all states except Tamil Nadu, in the south, where the Congress (I) and its allies were trailing a local party, the All-India Anna Dravida Munnetra Kazagam.

The results in Tamil Nadu cannot affect the results in the other states, especially in the politically important Uttar Pradesh and Bihar, which lie in the key Hindi-speaking Gangetic heartland.

Polling in the nine states ended on Saturday, in the most violent elections ever held in India. Clashes during the campaigning led to several deaths and nearly 30 people were killed on Saturday.

Mrs. Gandhi ordered the nine states' legislatures to be dissolved because of the poor performance there by non-Congress (I) parties during the parliamentary elections in January. She claimed the parliamentary election results showed other parties in power in the states had lost their mandate.

Final results will be known this evening, but Congress (I) is fairly certain to form the Governments in at least eight states.

Mrs. Gandhi is thus set to gain total control of the country. Her main opponents are now the Marxists who are in power in West Bengal and Tripura and have entrenched themselves in the eastern region.

HK prime rate cut again

BY PHILIP BOWRING IN HONG KONG

FOR THE second week in succession, Hong Kong's Exchange Banks Association, the local rate setting cartel, announced a 1.5 per cent cut in prime lending rate.

The rate is now 13 per cent, a reduction of 3 per cent from the record 16 per cent prevailing until a week ago. The second cut came as a surprise, as at the time of the first it was said the banks were only "fine tuning" the rate to take account of market conditions, and there would be no let-up in the use of interest rates to battle inflation.

Russian bid to conciliate Yugoslavia

By David Satter in Moscow

THE SOVIET UNION yesterday reaffirmed its respect for Yugoslavia's independence but said the dominant tendency over the past 25 years has been for the two countries to become increasingly united.

The Communist Party newspaper, Pravda, said: "The Soviet people want, and have always wanted, to see Yugoslavia as a single, united, prospering country, successfully building socialism."

The newspaper added, however, that since the 1955 Belgrade declaration, which ended seven years of hostility after the late President Tito decided to withdraw from the Comintern, the two countries had been growing "closer and more unified."

The Pravda article was the first major comment on Soviet-Yugoslav relations since President Tito died last month.

Record deficit for Denmark

By Hilary Barnes in Copenhagen

DENMARK'S first-quarter current balance of payments established a new quarterly record deficit, of DKr 6.6bn (£508m). This was almost twice the DKr 3.5bn deficit in the first quarter of last year, and compares with a DKr 15.6bn deficit for the whole of 1979, also a record.

Italian plea for coherent economic strategy

BY RUPERT CORNWELL IN ROME

Sig. Carlo Ciampi: A little time left

IN A bleak assessment of the country's economic health, Sig. Carlo Ciampi, Governor of the Bank of Italy, has pledged a tight monetary policy to fight inflation and preserve the stability of the lira.

In his first report as governor to the bank's annual meeting, Sig. Ciampi warned that the failure to produce a coherent economic strategy now meant that Italy was throwing away the benefits of the recovery since the last major crisis of 1976.

To underline his words, the Central Statistics Institute (ISTAT) yesterday announced a provisional trade deficit of L1,510bn (£770m) in April.

This brings the deficit for the first four months of 1980 to L5,285bn (£2.7bn) compared to one of L4,725bn for the whole of last year.

The governor's message was the familiar plea of the Bank of Italy—never heeded by politicians—that monetary policy could not alone put right structural problems in the Italian economy.

Business has been calling increasingly openly for a devaluation of the lira to provide a competitive breathing space. But such action has been repeatedly rejected by ministers. Inflation back at around 20 per cent, was attacking Italy with renewed venom, said Sig. Ciampi.

"The competitiveness of our products is declining. The public sector deficit is eating away available resources. The balance of payments is again in deficit. Dangerous company crises are dragging on and growing worse, while new ones are on the horizon," he said.

"The problems of companies, whether public or private, cannot be tackled by financial means alone. These can be useful when the basic problems of output have been settled. But otherwise, subsidy piles upon subsidy, and waste upon waste, all in the illusion of curing the problem but in fact making it still more difficult and costly to solve."

Sig. Ciampi said that industrial productivity in Italy had risen only 3 per cent over the past five years, less than in any of Italy's major competitors, while labour costs had climbed twice as fast.

In recent months, domestic inflation has pushed up the price of manufactured goods so fast that the international competitiveness of Italian industry had dropped by 7 per cent during 1979 alone.

The Governor urged that the "scala mobile" system of automatic wage indexation be changed to exclude from the system those price rises due to government increases in indirect taxes. The idea has been aired by other leading economic figures here but has always met a firm refusal from the trade unions.

Sig. Ciampi said Italy still had a little time left to put things right, and drew hope from the resilience and vitality of small and medium-sized industry and the "submerged" economy.

But he warned that the latter, which had developed in part as a result of the rigidity and poor profitability of the official economy, could not provide a long-term solution nor generate the industrial overhaul Italy needed.

Anglo-French rivalry breeds revolt in New Hebrides

BY PHILIP BOWRING, RECENTLY IN ESPIRITU SANTO

THE TROUBLE brewing for several months on the New Hebrides island of Espiritu Santo has now deteriorated to the point of open rebellion, only a few weeks before independence.

Mr. Walter Lini, chief minister of the British and French-ruled New Hebrides has appealed to the UN for help in dealing with the rebellion.

About 800 plantation workers armed with bows and arrows took over Government facilities in Santo, the largest town on the island, on Wednesday. They want the island to be a separate entity when the New Hebrides becomes independent on July 30.

Three boatloads of foreigners have left the rebel island and one vessel, with 60 people, has reached the island of Malekula, about halfway between Espiritu Santo and Efate, where the capital, Vila, is situated.

The trouble is directly ascribable to the inability of the joint colonial powers to co-operate to maintain the rule of law, and French officials' antipathy to the ruling Vanuaaku Party and its leader, Mr. Lini.

Only in such conditions could the bizarre event on Espiritu Santo have come about. The island's independence movement is a strange amalgam. The leader is an English-speaking mixed-blood named Jimmy Stevens. From a bush headquarters he runs a semi-co-operative semi-cult organisation which has attracted many tribesmen.

Mr. Stevens is essentially against any authority which interferes with his own sway over his mostly illiterate followers. He is especially hostile to the Vanuaaku Party, which essentially represents mission-educated and town-based people.

At talks last year on the independence constitution, France pressed for semi-autonomy for Espiritu Santo and another island, Tanna, which also has a big French-speaking presence. It was agreed that both islands have regional assemblies. But in elections last November, the Vanuaaku won majorities in the regional as well as national assemblies. Opponents claimed the election was fixed. French officials, however, torpedoed an electoral commission set up to investigate the allegations, by failing to attend. Meanwhile, Mr. Stevens declared Espiritu Santo to be the independent state of Vemarana. The district commissioner in Santo was run out of town, and government offices were occupied for a few days. The new Vanuaaku Government had no police at its disposal. The French balked at a British proposal to use the 80-man joint mobile police force still under colonial control.

Arafat re-elected as leader of Fatah

BY IHSAN HIJAZI IN BEIRUT

Mr. Yassir Arafat: Vote of confidence

MR. YASSER ARAFAT has been re-elected leader of the mainstream Palestinian guerrilla group, al-Fatah, and commander-in-chief of its forces.

He heads a 15-man central committee elected by Fatah's 530-member congress which ended an 11-day session in Damascus yesterday. The congress elected a 65-man revolutionary council to be Fatah's policy-making body.

Dr. Nabil Shaath, the chairman of the congress, said the congress, which constitutes Fatah's power base, decided to increase the armed struggle against Israel until "all" Palestine had been liberated. Reports from Fatah's first congress in nine years indicated a militant mood. The participants were from 80 Arab and foreign countries as well as the Israeli-occupied West Bank and Gaza Strip.

The new central committee includes five new members, while the ten serving are retained. They are Mr. Arafat's closest aides, and had helped him create Fatah in 1965 and make it into the largest and most powerful guerrilla organisation.

The committee includes Salah Khalaf, better known by his code name of Abu Iyad, and generally regarded as the second-in-command after Mr. Arafat.

Abu Jihad, whose real name is Khalil al-Wazir, was re-elected deputy commander of Fatah's 10,000-man force known as Al-Asifa.

The guerrilla movement's top diplomat, Mr. Farouk Kaddoumi, who heads the political department in the Palestine Liberation Organisation, was elected Fatah's secretary.

Fatah's new leaders include Brig. Saad Sayel, the chief of the PLO's military "operations room," Mr. Hani al-Hassan, the PLO's representative in Tehran, and Mr. Rafiq al-Natche, the head of the PLO office in Saudi Arabia.

The 15 men forming the leadership are a combaniation of militants and moderates. Some, like Abu Jihad and Abu Iyad, prefer to give priority to military action against Israel; others, like Mr. Khaled al-Hassan, advocate widened diplomatic and political activity for winning support, particularly in Western Europe.

Anger as Begin takes on defence portfolio

By David Lennon in Tel Aviv

THE ISRAELI Cabinet erupted in bitter exchanges yesterday as Mr. Menahem Begin, the Prime Minister, abandoned his planned Cabinet reshuffle and decided to appoint himself Defence Minister in place of Mr. Ezer Weizman who resigned last week.

The hard-line Agriculture Minister, Mr. Ariel Sharon, criticised Mr. Begin for having considered appointing the Foreign Minister, Mr. Yitzhak Shamir, who has little military experience, as the new Defence Minister.

Mr. Sharon, a reserve general, who wants the post for himself, said that the Prime Minister would not have even considered such an appointment if he realised the seriousness of Israel's security problems. These included a build-up of Soviet weapons in Syria and Libya and the current unrest in the occupied territories, he said.

The Agriculture Minister said the defence portfolio was too important to be used as a political reward and demanded that the job be given to him as the most experienced military man in the Cabinet.

Mr. Begin retorted that in many countries it was the practice not to appoint an officer or former military man to the post of Defence Minister. He then asked Mr. Sharon if he had already "leaked" the letter on this issue which he had sent to the Prime Minister last week.

Mr. Sharon snapped back that Mr. Begin was once again making vengeful comments just as he had in his wild attack on Mr. Weizman last week.

When the row died down the Cabinet approved Mr. Begin's decision to seek Knesset approval today for his continuing to hold the defence portfolio until a new minister can be appointed.

FINANCIAL TIMES, published daily except Sundays and holidays. U.S. subscription rates $365.00 per annum. Second Class postage paid at New York, N.Y., and at additional mailing centres.

WORLD TRADE NEWS

Washington retains quotas on clothing from China

BY RHYS DAVID

THE U.S. is to retain unilateral quotas on clothing imports from China following the failure of last month's talks to secure a bilateral deal.

China is already the fifth largest supplier of textiles and clothing to the U.S. and is soon expected to overtake Japan, which has for some time been shipping lower quantities. The Chinese have been seeking substantially improved access amounting in some cases, U.S. officials claim, to a doubling or tripling of imports of some products.

The unilateral quotas were first introduced last year after a similar failure to reach agreement, and it would seem that neither side has been prepared to change its position since then. Informal talks aimed at narrowing the gap were held in Peking in April and it was thought sufficient progress had been made for formal talks to be held last month in Washington. These have now been suspended with no date set for resumption.

American negotiators have expressed some puzzlement at the reluctance of the Chinese to compromise. They speculate that the Chinese may have overestimated the bargaining power of their customers — the U.S. importers. Another view is that China may even prefer to allow the U.S. to set unilateral levels rather than become involved in the complications of a bilateral deal with the resultant problems of administering an export control system.

As it is, U.S. officials say China is already being treated as though it were a signatory to the GATT Multifibre Arrangement (MFA), the agreement regulating world trade in textiles, and the present unilateral restraints have been drawn up in accordance with MFA provisions. And the U.S. has emphasised that if China was prepared to sign a bilateral deal it would be accorded more generous treatment than under the unilateral restraints.

The access already given to China in the U.S. recognises their absence from world trade for a number of years. "Indeed before taking unilateral action we had already allowed China's trade to grow to the highest level of any country before requesting consultations," Mr. Reiter Webb, chief U.S. Textile Negotiator commented. "The Chinese cannot go from nowhere to being our largest single supplier. We cannot take on another Hong Kong, South Korea or Taiwan," he said.

RSV wins £174m U.S. coal deal

BY CHARLES BATCHELOR IN AMSTERDAM

RIJN - SCHELDE - VEROLME (RSV), the Dutch engineering and shipbuilding group, has won a Fl800m (£174m) order to deliver coal excavation machinery to a U.S. mining group. The machines, which have been developed by RSV, allow high levels of recovery from thin seams which are normally uneconomic for existing equipment.

The Dutch group is also a minority shareholder in the U.S. equipment leasing and mining companies. It has quarter shares in the thin seam Miner Leasing Corporation and in the Coal Systems Company, with the Independent Coal Company and Coal Systems of Texas owning 25 and 50 per cent respectively.

Delivery will start at the end of this year with the dispatch of five machines, rising to 35 in 1981 and between 236 and 500 machines in subsequent years up to 1985. They will be made at RSV's WF-RDM subsidiary using components supplied by other RSV divisions as well as outside companies.

The new equipment will be used in opencast conditions to work the many thousands of miles of "high walls" in Kentucky, Tennessee, West Virginia and Virginia. It can recover up to 85 per cent of coal in layers of between 60 and 150 centimetres working up to depths of 70 metres.

Six times more coal can be recovered than under conventional mining systems, and it is clean enough not to require washing. Each machine can mine up to 200,000 tonnes of coal a year giving potential capacity for the entire project of 40m tonnes.

RSV estimated that the new equipment was four years ahead of anything available elsewhere.

Delivery of the new machines will initially be exclusively to the companies involved in the thin seam project.

● Fokker, the Dutch aerospace group announced the sale of two 75-seat F-28 Mark 40000 passenger jet aircraft to East West Airlines of Australia. The value of the order, including spares, is Fl 23m and delivery is due to take place in September, 1981, and mid-1982. East-West has also taken an option on a further three aircraft. The order brings the number of F-28s sold to 162.

Rome, Caracas finance plan

ROME—Italy and Venezuela are studying a plan for a new joint financial institution the majority of whose capital would be underwritten in equal parts by public financial institutions from both countries.

The object of the institution would be to encourage the transfer of Italian technology to Venezuela. The plan was announced recently in an official communique concerning the first bi-annual meeting in Caracas of the trade co-operation agreement between the two nations signed in December.

Among other agreements confirmed at the meeting was the regular increase of total oil supplies to Italy to 100,000 barrels a day, up slightly from the December agreement.

A proposal linking further increases in Venezuelan crude and petroleum product supplies to the value of Italian goods and industrial services furnished to Venezuela was discussed, but a definitive agreement was not reached.

Also considered were the possibilities of new joint ventures involving Italian refinery capacity and Venezuelan oil.

AP-DJ

Fast rise in UK trade with Zimbabwe

By Mark Webster

BRITAIN'S trade with newly independent Zimbabwe has developed fast since sanctions were lifted in November last year, according to figures from the Department of Trade.

British exports reached a monthly high of £1.8m in March this year as UK companies took advantage of what was traditionally a major market for British goods, officials said. But there is still plenty of room for expansion, they added.

Total British exports for the first four months of this year are £3.8m, although there has been an unexpected decline in the volume of trade for April.

While most of the British exports to Zimbabwe have been capital goods and equipment to replace ageing stocks, most of the Zimbabwean exports to Britain have been raw materials, iron and steel, officials say.

The official figures show total imports from Zimbabwe at £5.5m for the first four months of this year but that is thought to include the return to the UK of aircraft provided to Zimbabwe up to the time of independence which are included in the Department of Trade's figures.

Once the pattern of trade is established it is likely that Britain will run a healthy trade surplus with Zimbabwe because of the country's need to replace its capital stock and get its industry fully modernised.

Reflecting the intense interest in the Zimbabwe market by British businessmen, a major conference is being held in London on July 17-18 at which two senior Zimbabwe Government officials will speak.

The conference is being organised by London Export Conferences of Tavistock at the Hilton Hotel in association with British Airways and Air Zimbabwe, with whom they have a commercial agreement.

Among the speakers will be Mr. Nathan Shamuyarira, the Minister of Information and Tourism in the new Government and Mr. Oliver Muñyaradze, the Deputy Minister of Finance.

Manila approves U.S. can ventures

BY OUR MANILA CORRESPONDENT

THE TWO largest American can manufacturers, Continental Can (Contican) and American Can International (ACI), have been granted government approval to set up manufacturing facilities in the Philippines, despite strong opposition from local companies.

Contican, which applied for approval in 1978, is tieing up with Ayala Corporation, one of the biggest local concerns engaged primarily in real estate development. The U.S. company is taking a 40 per cent stake in the peso 209m ($27m) project.

ACI, which announced its plan to operate in the Philippines earlier this year, is also putting up 40 per cent equity in a pesos 300m ($41m) venture with Elizalde, the only tin plate manufacturer in the Philippines. It will operate as the Philippine Container Corporation.

The letters of approval granted to the two companies by the Board of Investment, indicate that they will produce food-grade and beverage cans. They are also required to export at least 30 per cent of their annual output—10 per cent directly as tin cans with the remaining 20 per cent to be sold to local food processors who will later export the tinned finished products.

Contican-Ayala's approved annual capacity is 300m food grade cans and 100m beverage cans while that of the ACI-Elizalde venture is 150m food grade and 450m beverage cans.

At the time of Contican's original application the tin can making industry was on the "overcrowded" list of industries, where foreigners are prohibited because they are already adequately exploited by local companies.

Earlier this year, however, the can manufacturing industry (together with 19 other industries) has withdrawn from this list by the Ministry of Industry and the National Economic and Development Authority.

The move was part of the Government's effort to spur competition from foreign companies with the aim of upgrading local productivity, and encouraging foreign investments, especially in export-oriented ventures.

However the approval of the two U.S. ventures has not only angered local companies but also surprised Contican which has said that it will now revalue its plans because of likely overcapacity.

An Ayala official said that the local market cannot absorb the combined output of the two new companies. The most viable local market for food-grade cans is the fish market, particularly sardines and tuna, but the official said that the respective clients of Contican and ACI will have to scramble for the supply of fish.

SHIPPING REPORT

Market activity picks up as VLCC rates improve

BY WILLIAM HALL, SHIPPING CORRESPONDENT

THERE WAS a flurry of acivity in the Very Large Crude Carrier (VLCC) market towards the end of last week and rates have marginally improved.

John I. Jacobs, London shipbrokers, reports that for the main tanker trade route, Westwards out of the Gulf, the rate for VLCCs has risen to Worldscale 32.5. For the bigger Ultra Large Crude Carriers (ULCCs), rates have fluctuated between Worldscale 27.5 and Worldscale 32.5.

The tanker market often picks up in the summer but few companies appear very optimistic about the next few months.

World oil stocks are high and a senior executive of Shell Transport and Trading, one of the world's biggest tanker operators (206 tankers, totalling 25.7m dwt) is reported as saying recently that Shell's chartering requirements would drop by around 1.3m dwt in the current year.

In the dry cargo markets, the Atlantic remains firmer than the Far East and rates reflect this fact.

Denholm Coates reports that the Russians chartered several ships for round trips out of the River Plate. The vessels, of between 27,000 dwt and 40,000 dwt, were fixed at between $12,000 and $14,000 per day.

Travel catering event

BY OUR WORLD TRADE STAFF

AN INTERNATIONAL travel catering exhibition and conference, ITC 80, is to be held in London from June 24 to 26. The three-day event will cover airline/airport catering and ship services with participants from the food, soft drinks and liquor industries together with duty-free trade specialists as well as representatives of the tableware, catering equipment and specialised packaging suppliers.

ITC 80, which will be staged at the Kensington Town Hall Conference Centre, is being sponsored by the monthly publication International Travel Catering, published by Thomas Reed International Press. It will be opened by Sir Charles Forte, executive chairman of Trusthouse Forte.

● Trusthouse Forte, through its subsidiary, THF International Management, has signed an agreement with the Housing Bank of Amman, to manage a 340-room luxury hotel in Amman.

GDR stages engineering week in Britain

BY OUR WORLD TRADE STAFF

EAST GERMAN, the London and Birmingham Chambers of Commerce together with the GDR Chamber of Foreign Trade, are organising a GDR engineering week this week.

Taking place in London, Birmingham and Edinburgh, the event is being held at a time when quarterly trade figures reveal a threefold increase in UK exports to East Germany *compared to the same period* last year, with exports totalling £36.7m for the first three months this year against £12.145m for the first quarter in 1979.

Imports from East Germany totalled £30.98m in the first three months of this year compared with £18.57m in the same period last year. This swings the trade balance with the GDR in Britain's favour, reversing the trading pattern between the two countries in recent years. Last year UK exports to East Germany totalled £58.16m against imports of £111.7m while in 1978 UK exports amounted to £47.46m compared with imports from East Germany of £88.39m.

Under the joint patronage of Dr. Gerhard Beil, member of the Council of Ministers and Secretary of State at the GDR Ministry of Foreign Trade, and Mr. Cecil Parkinson, Minister for Trade, the engineering week will include presentations on machine tools, plastics, agricultural machinery, textile machinery, office equipment, printing machinery and medical equipment.

World Economic Indicators

INDUSTRIAL PRODUCTION

					% change over previous year	Index base year
	Apr. '80	Mar. '80	Feb. '80	Apr. '79		
U.S.	148.5	151.2	152.4	150.5	− 1.5	1967=100
	Mar. '80	Feb. '80	Jan. '80	Mar. '79		
UK	108.9	110.2	111.4	111.5	− 2.3	1975=100
Holland	117.0	117.0	116.0	110.0	+ 6.4	1970=100
Germany	130.0	123.4	114.8	122.2	+ 6.4	1970=100
Italy	136.0	135.0	135.0	132.0	+ 3.0	1970=100
France	136.0	135.0	135.0	132.0	+ 3.0	1970=100
	Feb. '80	Jan. '80	Dec. '80	Feb. '79		
Japan	147.7	139.8	138.1	129.3	+14.0	1975=100
	Jan. '80	Dec. '79	Nov. '79	Jan. '79		
Belgium	108.4	112.5	123.7	97.6	+11.1	1970=100

Minister will discuss Greek EEC alliance

BY WILLIAM HALL, SHIPPING CORRESPONDENT

BRITISH CONCERN about the number of substandard Greek merchant ships is likely to be voiced by Mr. Norman Tebbit, Parliamentary Under-Secretary of State for Trade, when he meets Mr. Ioannis Fikioris, Greece's new Minister of Mercantile Marine, in Greece this week.

Mr. Tebbit, who will be attending the opening of the seventh Posidonia International Shipping Exhibition in Piraeus today, is the first UK minister to meet a member of the new Greek Government.

His visit is timely since Greece joins the EEC at the beginning of next year. Until now Britain has been the only major maritime country in the EEC. It and Greece will control 60 per cent of the EEC merchant shipping fleet.

In common with British ships, the Greek merchant navy relies heavily on the "cross trades"—transporting goods between third countries. Over the past few years "cross traders" have been under considerable pressure since many countries are becoming increasingly protectionist and reserving cargoes for their own ships.

Britain hopes Greece will be an important shipping ally in the enlarged EEC. However, British officials are worried that the effectiveness of Greek support on matters of mutual shipping interest may be reduced because of growing criticism of the safety record of Greek ships.

Mr. Tebbit is also expected to discuss a £400m order for four replacement frigates for the ageing Greek navy.

Yarrow, the UK warship-builder, has submitted an offer for four ships of which one will be built in Britain. Under the proposal, the remaining three will be built in Greece and this has generated considerable interest in the Greek shipbuilding industry.

The week-long Posidonia Shipping Exhibition is one of the major events on the international shipping calendar. It will be opened today by Mr. Fikioris. Mr. Richard Burke, the EEC Commissioner for Transport, will also attend.

Exhibitors from approximately 600 companies from 40 countries will be participating, and some 3,000 chairmen and senior executives of the world's leading shipping companies are expected to attend.

Business bureau plan

A "marriage bureau" to bring small businesses together with potential investors, partners, and managers has been set up by the London Enterprise Agency.

It is aimed at helping businessmen who want either to set up or expand enterprises. A register of business propositions will be built up which will be circulated to interested institutions.

The agency was created last year by a group of large companies to channel help to small businesses and the idea of the "marriage bureau" has grown because of the problem that small businesses can face in finding backers.

The bureau will also prepare a list of retired or redundant executives available to provide managerial and other advice.

● Mr. Barry Baldwin, chairman of the economic committee of the Union of Independent Companies, has been appointed an adviser on small businesses to the Conservative Party. He has been seconded by Price Waterhouse, for whom he works, for up to two years.

Call for energy conservation

A NATIONAL energy conservation policy is called for by the Council for the Protection of Rural England in its annual report published today.

The council says that more stress should be laid on the reduction of primary energy demand rather than the Government's emphasis on the steady increase in energy supplies.

Help curb rate rises says CBI

By Alan Pike

BUSINESSMEN ARE being urged to take a more active interest in the affairs of local authorities as part of a Confederation of British Industry campaign to curb rate increases.

The CBI campaign is designed to attack high levels of local authority spending and the consequent impact on business rates. Industrialists are being urged to use their influence to persuade councils to limit their budgets and seek better value for money.

Mr. Bryan Rigby, deputy director-general of the CBI, said yesterday: "The most effective way of dealing with the problem is to improve the contact between businessmen and local authorities. They have a mutual interest in the success of their local economy."

The CBI is suggesting to businessmen they should get involved in running local authorities as well as trying to influence them from outside.

Industry warns on grant cuts

INDUSTRY AND commerce could be seriously damaged by the Government's proposals to penalise some local authorities for overspending by withholding a portion of future grant, the London Chamber of Commerce and Industry says today.

The Government is considering a list of local authorities which have overspent by the largest margin with a view to imposing financial penalties on the worst 20 or so, most of which will be in London.

Hunt challenges £17m BP award

MR. NELSON Bunker Hunt, the American millionaire best known for his activities in the silver market, will challenge in the Appeal Court tomorrow an award of £17m made to BP Exploration (Libya) by a High Court judge last year.

The appeal concerns an agreement in 1960 under which BP joined Mr. Hunt in the exploitation of an oil concession he had obtained in the Sarir field in Libya three years earlier.

In return for a half-share in the concession, BP undertook to explore and operate the oilfield.

Offshore oil jobs may increase 50% by 1987

BY RAY DAFTER, ENERGY EDITOR

OIL COMPANIES operating in the UK sector of the North Sea are preparing to increase the number of their offshore employees by up to 50 per cent in the next seven years.

A new offshore study shows that the number of men required to service oil production platforms in the oil-producing central and northern sectors of the North Sea could rise from about 8,600 at present to between 10,900 and 13,100 by 1987. Much will depend on oil company development plans, and Government measures to control the rate of offshore production.

In addition, the number of men working on mobile drilling rigs could rise from 1,700 at present to about 2,000 in seven years, according to estimates published by stockbrokers Wood, Mackenzie in their latest North Sea Report.

Mobile units

The increase in the numbers working on mobile units—mainly semi-submersible and jack-up drilling rigs—would be dependent on oil companies becoming more active in exploration, appraisal and development work. Taking the most optimistic view, Wood, Mackenzie see manning levels on these mobile units rising to 2,200 next year and dropping to 2,000 annually from 1984 to 1987. On the other hand, pessimistic assumptions about drilling activity lead to the view that numbers will peak at 1,950 next year and drop gradually to 1,300 by 1986 and 1987.

The brokers point out that manning levels will have a big impact on helicopter and shipping operations. Each fixed offshore platform is staffed by between 100 and 200 men and, in some cases, women. All the offshore operators commute to and from the mainland by helicopter.

Helicopters

Airline operators have started ordering larger helicopters to cope with the traffic. Wood, Mackenzie says that ships could be used but they would be much slower than aircraft and, consequently, unpopular with crews.

Another possibility would be a floating, semi-submersible airport which would handle both helicopters and fixed-wing, short take-off and landing aircraft. Crews could fly directly from cities, such as Glasgow, Edinburgh and Newcastle, to a location close to the main oil producing platforms, where they would transfer to helicopters.

While a large capital investment would be required initially, there could be operational cost savings. Furthermore, the concept could relieve air traffic congestion around Aberdeen and Sumburgh.

Seaforth orders two ships from Singapore Slipway

SEAFORTH MARITIME, of Aberdeen has placed an order with Singapore Slipway and Engineering for the construction of two 3,060 deadweight tonne platform supply vessels for delivery in autumn next year.

British Shipbuilders was among the companies which reached a final shortlist of five contenders for the contract.

The two new ships, designed by Maritime Engineering A/S of Oslo in consultation with Seaforth's technical projects department, are the fifth phase of the company's building programme. They are the first vessels to be built by the company solely for platform supply duties.

The ships are designed to carry a higher payload than most normal supply vessels, while remaining within the size of conventional craft.

Seaforth, jointly owned by James Finlay (55 per cent) and Taylor Woodrow Construction (45 per cent) currently has a fleet of 14 owned and managed vessels. The two new ships will improve the flexibility and range of the company's marine operations.

Christine Moir explains the new Companies Act

Restrictions may boost share option schemes

THE TIGHT restrictions on share dealings by company directors and employees in the new Companies Act should indirectly encourage share option schemes, the Government hopes.

The Act makes it a criminal offence for people connected with a company, particularly its directors, senior employees and professional advisers, to disclose specific confidential and price-sensitive information to potential share dealers or to deal in such information themselves.

Since a company's directors may be assumed to be in possession of "inside information" most of the time, there have been fears that the Act will discourage directors from holding shares in their own companies.

The Government does not believe that the "insider dealing" provisions of the Act, which come into force on June 23, will in practice have such an effect. However, it points out that, if directors are concerned about dealing in the market, they can freely subscribe for shares in their company offered through an option scheme.

This should encourage companies to introduce such schemes, which complement the Government's desire to promote wider share ownership, particularly among company workers.

The criminal offence of "insider dealing," however, does not merely cover connected persons. The provisions of the Act make it an offence for anyone to profit by share dealings based on inside information of a substantially price-sensitive nature about specific company affairs.

The key changes between this definition and the clauses drafted under the Labour Government's proposed Companies Bill are that the information must be of a specific nature and that they must be reasonably expected to have a substantial effect on the share price. Information of a general nature and that which might only cause the share price to move narrowly are not matters of concern.

Criminal proceedings under the provisions will be able to be instigated only by the Director of Public Prosecutions or with his permission, but personal allegations of insider dealing after June 22 can be referred to the Trade Department.

Several other provisions of the Act also come into force on June 23, in particular the duty of directors to have regard to the interests of their employees as well as of shareholders.

New car sales up record 17% in first quarter

RECORD first-quarter car sales helped push up turnover at the retail end of the motor trade by 20 per cent compared with the first three months of last year.

Department of Industry statistics published yesterday show sales of new vehicles, including cars, commercials and motorcycles, up 17 per cent on last year's first quarter.

The biggest increase—of 26 per cent—was in sales of petrol and oil, tyres, spares, accessories and receipts from servicing and repairs.

However, the statistics are at current prices, and inflationary factors such as oil price rises and higher labour rates have had a particular impact in this sector and in volume terms its contribution is comparatively less.

The weakest sector was used vehicle sales, dominated by private buyers, which rose by only 12 per cent.

Advice on BR

DISPENSERS holding up to 600 leaflets advising rail travellers with complaints to write to the Transport Users' Consultative Committee of their areas are to be placed in 21 British Rail travel centres.

Minister may keep quiet on S. Africa companies

BY ALAN PIKE

PRESSURE GROUPS seeking the names of British companies paying South African workers wages below subsistence level fear that Mr. John Nott, the Trade Secretary, will refuse to provide the information in a written Commons reply today.

Labour MPs are demanding the names of 33 companies paying at least some of their black workers below subsistence level, and a larger number paying less than EEC recommended rates.

Mr. Nott was away from his Department last week and will review the position today. Indications are he will take the view that publication of the names, from information provided to the Department of Trade by some 200 British-owned companies trading in South Africa, is inappropriate.

MPs seeking the information claim withholding the names would encourage companies to ignore the spirit of codes on employment conditions for South African workers produced by a Commons select committee in 1974 and the EEC in 1977. Last year 18 companies were named under the protection of Parliamentary privilege.

Supporters of naming believe that publicity and pressure from shareholders are the best weapons with which to attack the problem.

But against this it is argued that repeated publicity might discourage companies from providing information, making Government pressure against offenders more difficult to achieve.

Many farmers 'doing nicely'

DOOM-LADEN PREDICTIONS for the future of British farming should be taken with a pinch of salt, according to Dr. Robert Bruce, general manager of Midland Bank's agricultural division.

Some farmers, probably fewer than 10 per cent, were in trouble because of rising costs and stagnant returns, he said at the weekend, but many were doing "very nicely."

Dr. Bruce was launching a new edition of the bank's booklet, The Farmer and the Lender.

Families switch to lamb

BRITISH consumers are showing little sign of tightening their belts in spite of sharp rises in food prices.

In the final three months of last year average spending per head on food for consumption in the home was £6.71 a week, 16.5 per cent above the level a year earlier. This compared with a 13 per cent rise in food prices over the same period.

About half the increase in real food reflected purchases of more convenience foods.

The figures published today in the Ministry of Agriculture's Food Facts bulletin do, however, provide some evidence that housewives are counting the pennies.

A rise of nearly one ounce to 16.87 ounces in weekly red meat consumption disguises a wide variation for different types of meat reflecting different price trends.

Consumption of lamb, for which prices fell, rose 26 per cent; pork prices rose only marginally and consumption was up 12 per cent; but much higher prices for beef cut consumption by 5 per cent.

Household purchases of poultry continued to advance, reaching 7.78 ounces per person per week, up 23 per cent.

Recession in engineering confirmed

BY HAZEL DUFFY, INDUSTRIAL CORRESPONDENT

THE WIDELY forecast recession in the engineering industry seems to have been under way by the first two months of the year, according to figures in the official magazine, in British Business.

Caution needs to be exercised in interpreting the statistics, however, because of the disruption and subsequent partial recovery caused by the dispute in the industry last summer.

New orders, measured on the basis of an estimated trend, fell 3 per cent between November and February, the November index of 101 (1975 monthly average = 100) declining to 98 in February.

Sales increased by 4 per cent, reflecting the return to full-time working and increased production. Sales have exceeded new orders from the home market in January and February, bringing a decline in the orders-on-hand.

The brief surge in export activity last autumn has also begun to tail off. New export orders fell 2 per cent between November and February, when the index at 102 was far below any period the previous year.

The statistics cover the electrical, mechanical and instrument sectors. Some forecasts for the mechanical sector have predicted a serious decline in orders over the next 18 months.

British Business also says that the general fall in capital spending has hit the machine tool industry. Statistics indicate that new orders fell by 16.5 per cent between November and February.

Car insurance up 18% for ½m

ABOUT 500,000 motorists insured with Commercial Union Assurance face higher premiums for their motor insurance.

The company will raise its premium rates by an average of 18 per cent from today—slightly below the rise in the cost of living.

Olympic coverage debate

BY ARTHUR SANDLES

ITV AND BBC decide this week just how much coverage they are going to give to the Moscow Olympics.

Faced with a moral dilemma and worries over audience interest television coverage is likely to be two-thirds less than originally planned.

The depth of feeling has been revealing itself in a hardening of attitudes within ITV. While the BBC has been able to work towards a policy through internal debate, ITV's federal system, which requires broad agreement from the member companies, has produced considerable strain.

At one end of the spectrum is ATV which wants little Olympics coverage and certainly little live coverage.

Strongly disagreeing is London Weekend Television which believes that the Olympics will be popular and it is not for television companies to turn their backs just because of the location.

A degree of compromise has been reached. However, much will depend on the BBC attitude. Some people in ITV hope that a form of shared coverage can be worked out.

Paul Cheeseright on the new issue of British tin shares

Mining facts belie romantic ideas

A SENSE of sentimental chauvinism surrounds tin mining in Cornwall and Devon. This Poldark factor had its most obvious expression in October, 1977, when 35 per cent of South Crofty, the country's largest tin mine, was floated off. It was more than 45 times oversubscribed.

South West Consolidated Minerals will be hoping for a similar display when the application list opens on Thursday for the sale of 5.5m of its shares at 50p each, making up 25 per cent of the equity in this subsidiary of Dundonian, the group best known for its funeral interests.

It may be a vain hope. Expressions of romanticism are easy against a background of profits and dividends. South Crofty was a working mine. SWCM offers not dividends, but aspirations—perhaps a job in three or four years and a pay packet in five.

Excluding the big international houses, SWCM will bring to four the number of local mining issues traded in London. Like Hemerdon Mining and Smelting, it will be an exploration issue and traded under Stock Exchange Rule 163 (3). This provides for North Sea and other mineral exploration companies which do not have an established earnings record to come to market, at what amounts to a step below a full listing. The other two companies are Geevor, the Lands End tin producer, and South Crofty itself.

A century ago there were some 200 British mining companies with shares trading in London. The reduction to four is one good indication of the way the facts of mining in the South-West belie romantic notions.

The UK was the leading metal mining country in the mid-19th century, but the local industry could not withstand the competition from large deposits abroad. Local consumers found it cheaper and just as convenient to buy from Africa, Asia, and the Americas.

That situation still obtains, although about a quarter of UK tin needs are met locally. The Cornish tin mines remain high cost producers. Underground mines cut out of granite with a costly wage structure are hardly likely to produce as cheaply as the alluvial mining companies of Malaysia.

What has changed in recent years has been the rise in tin prices and increased demand for speciality metals such as tungsten. This has enabled Geevor and South Crofty to survive and given a fresh impetus to exploration in the South-West.

Arguments abound about how richly mineralised the South-West is. The mining techniques available to previous generations meant that only some of the tin and copper near the surface has been taken. There was no interest in tungsten. Wherever possible, it was left.

Ore is available, yet the amount of mining is small. Looking at this more generally, the Institution of Mining and Metallurgy told the Government in 1978 that "the problem in the U.K. appears to be not so much poor mineralisation of our rocks, but the small size of the country—coupled, of course, with a high population density, high industrialisation, and consequent high mineral demand and need for planned overall use of limited land area."*

The biggest mines started in the South-West in the last 15 years — Wheal Jane by Consolidated Gold Fields and Mount Wellington by Cornwall Tin and Mining — have not stayed in business, although Rio Tinto-Zinc plans to reopen Wheal Jane, apparently finding the ore which eluded its predecessor.

Wheal Jane's failure lent substance to the argument that the South-West was best suited to small companies. "In Cornwall, the wrong way to open a mine is to start by spending large capital sums at surface," wrote three local experts.*

"It is essential to keep a tight rein on finance and to avoid the promiscuous use of computers and other electric and electronic equipment, expatriate salaries, luxury offices and hordes of experts whose expertise is not that of Cornwall or tin."

There have been barriers to small companies. One is the difficulty of locating the ownership of mineral rights, although SWCM has beaten that problem by finding at Callington a tract of more than 3,000 acres where the rights were consolidated into single ownership. Others are lack of certainty about gaining planning permission and finance.

Venture capital for mineral exploration is often hard to find. The Government will help through the Mineral Exploration and Investment Grants Act, 1972, but private sector sources have often set themselves against the speculative element involved.

Now exploration companies can have their shares dealt under Rule 163 (3), this difficulty may be eased. The treatment of SWCM's offer will give some indication of whether the investing public will treat UK risk ventures with the same indulgence they gave to Australian mining hopefuls.

* *Some promising mining prospects in Cornwall by W. E. Sevier, B. Earl and J. Brooke; Transactions/Section B of the Institution of Mining and Metallurgy, Volume 88 1979.*

SWCM offer details, Page 20

BUSINESSMAN'S DIARY

UK TRADE FAIRS AND EXHIBITIONS

Date	Title	Venue
June 2—7	International Materials Handling (021-705 6707)	NEC, Birmingham
June 6—14	Fine Art and Antiques Fair (01-385 1200)	Olympia
June 8—11	Sunday Times Business to Business Exhibition (01-407 4046)	Earls Court
June 10—12	June Carpet Fair (01-236 0911)	Kensington, W8
June 10—13	Institute of Housing Annual Conference and Exhibition (01-242 3267)	Exhibition Centre, Harrogate
June 11—14	Photo-Sound 80 (0232 32630)	Kings Hall, Belfast
June 16—20	International Solid Waste Congress and Exhibition (01-580 5324)	Wembley Conference Centre
June 24	Intel Microcomputer Fair (0793 26101)	Wembley Conference Centre
July 1-3	Energy Show (01-637 3636)	Cunard International Hotel, W
July 1-3	Temperature Measurement and Control Exhibition and Conference (0822 4671)	Wembley Conference Centre
July 6-10	Autumn 80 Lightshow (02488 396)	NEC, Birmingham
July 8-10	Great Yorkshire Agricultural Show (0423 61536)	Harrogate
July 9-6	Royal Tournament (01-930 6009)	Earls Court
July 11-20	Taste of Asia Exhibition (01-272 4287)	Olympia
July 15-16	Exhibition and Conference on Micro Technology—MICROFAX (061-236 4612)	Manchester

OVERSEAS TRADE FAIRS AND EXHIBITIONS

June 5—9	International Carpet and Floor Coverings Exhibition (01-439 3964)	Paris
June 9—14	BIAM—International Machine Tool Exhibition	Zagreb
June 10—14	Educational Equipment Exhibition—VISODATA (01486 1051)	Munich
June 17—19	Advanced Communications Exhibition—EURO-COMM 80 (01540 1101)	Copenhagen
June 19—22	Solar Energy Exhibition	Genoa
June 23—26	World Frozen Food Exhibition (01-629 8817)	Monte Carlo
June 23—26	ASEE Educational Resources Exhibition (01-437 0678)	Massachusetts
June 24-27	International Solar Forum (02013 4450)	Hamburg
June 28-July 4	International Welding Exhibition (01-278 0281)	Brno
June 28-July 6	Motor Show, Components and Accessories Exhibition	Braga
July 1-4	Latin American Oil Show (01-322 0466)	Rio de Janeiro
July 2—6	Audio Visual Exhibition AUVI (021-705 6707)	Singapore
July 7—11	International Training and Educational Symposium and Exhibition—INSTRUCTA (01-486 1951)	Johannesburg

BUSINESS AND MANAGEMENT CONFERENCES

June 1—6	University of Bradford: Production Scheduling Workshop (Bradford 491773)	Heaton Mount, Bradford
June 2—3	FT Conference: World Banking (01-621 1355)	Singapore
June 2—3	AMR International: U.S. Financial Reporting and Disclosure Requirements for Multinational Corporations (01-262 2732)	Grosvenor House, Hotel, W1
June 4	Gower Conferences: Business Strategy for Strong Sterling (0242 9485)	Royal Lancaster Hotel, W2
June 4	CCC: Company Pension Rights—Consequence of Employees Changing Jobs (01-222 6362)	Tara Hotel, Kensington
June 4	IDHE: Strategy for Survival (03745 54266)	75 Mark Lane, EC3
June 4	Manpower Research Group: The West Midlands Economy in the 1980s (Coventry 24011)	University of Warwick
June 5	The Spring Research and Manufacturers Association: Costing for Estimating in the Spring Industry (0742 760771)	Birmingham
June 5	TEC: Training for Change in the Eighties (0865 512784)	Mayfair Theatre, W1
June 5	Oyez: Successfully introducing and using current cost accounts in your company (01-242 2481)	Inn on the Park, W1
June 5—6	AMD: Improving Results through Time Management (07535 56047)	Royal Garden Hotel, W8
June 8—13	Brunel University: Experimental methods for management training and development (0895 56461)	Uxbridge
June 9—10	AMD: Communication and Confidence Development for Managers (07535 56047)	Gloucester Hotel, SW7
June 10—11	INFOTECH: Which Word Processor? (0628 39101)	Tara Hotel, Kensington
June 11	Institute of Management Services: Staff Appraisal and Development (01-363 7452)	Mount Royal Hotel, W1
June 11—13	AMR International: The Management of Projects (01-262 2732)	Browns Hotel, W1
June 13—14	PCL: Technology and Adjustment to Change at Firm Level — German Swedish and UK experience (01-486 5811)	Marylebone Road, NW1
June 17	Eurex: Information, trading and confirmation system for Eurobonds (01-638 3787)	Great Eastern Hotel, EC2
June 17—18	ASM: Current Cost Budgetary Control (01-385 1992)	Europa Hotel, W1
June 17—18	Inst. Mech. E: Progress Towards Safer Passenger Cars in the UK (01-222 7899)	Westminster, W1
June 18—19	FT Conference: The European Offshore in the 1980s (01-621 1355)	Grosvenor House, W1
June 24	Oyez: Pensions in the private sector (01-242 2481)	Carlton Tower, SW1
June 25—27	Monotype International: Typographical Quality and Modern Technology are Compatible (91-6595?)	

LABOUR PARTY CONFERENCE

Delegates avoid brawls and bloodbaths

CONNOISSEURS OF Labour Party brawls were keenly looking forward to the one-day Wembley conference. Companies were being made with the great party battles over clause 4, nuclear rearmament and other notable bloodlettings of the past.

But it was not to be. Those who trudged through the rain for the debate on the NEC policy document "Peace, Jobs, Freedom" were disappointed if they were looking for excitement. No teeth were knocked out, no eyes blacked.

Mr. Callaghan, the party leader, was heard in polite silence by a subdued audience and dutifully applauded at the end. Mr. Anthony Wedgwood Benn who wound up with an appeal to the hearts of the Left, received a standing ovation from most of the 1,200 delegates.

The tide of resentment said to be building up over the need for greater party democracy trickled away into minor tributaries.

Every speaker had a pet theme—the Third World, education cuts, the health service, race relations, the Common Market.

The main subject apparently taxing the minds of party activists was the proposal to station Cruise missiles in Britain. Any denunciation of this scheme was good for a cheer.

Demands for import controls were also enthusiastically received by delegates who conveniently overlooked the rows of Datsuns and Renaults parked outside.

A woman delivered a furious tirade against delegates smoking in the hall. Behind her, Mr. Ron Hayward, the party secretary, puffed guiltily at a cigarette and muttered that the air conditioning changed the atmosphere every few seconds.

The conference sprang temporarily to life when Dr. David Owen, the former Foreign Secretary, defended the Cruise missile and argued that Britain must negotiate with the Soviet Union from strength.

As well as being a leading moderate, Dr. Owen has several other qualifications as an Aunt Sally for the Left. He is urbane, well dressed, and speaks with a posh accent. His argument was greeted with jeers.

Mr. Denis Healey, the shadow Chancellor, was just getting into his stride with a spirited attack on "toytown Trotskyists" when Baroness Jeger, who was in the chair, spoilt the fun by telling him that his five minutes was up.

The baroness emerged as the one genuine character of the day. The television lights prevented her from seeing what was going on in the hall so she improvised with descriptions of the dress of those she wished to call to the rostrum.

The "good looking plumpish gentleman in the grey suit" turned out to be the craggy figure of Joe Gormley, the miners' leader.

Interference over the speaking system provoked her into making a quip about the "Tory sound engineer."

The gentleman in question turned out to be a local Labour Party supporter. The Baroness made a hasty public apology.

It all ended amiably enough with one of those staggering Labour Party card votes: 5,164,00 voting for the document and 6,000 against. The Red Flag was sung and delegates left for home.

Not so the indefatigable Mr. Benn, who sped off to a post-conference rally. The subject: "Fighting for the Alternative."

Conference reports by John Hunt and Ivor Owen

Benn argues against Cruise missile bases

MR. ANTHONY Wedgwood Benn came out strongly against reintroduction of an incomes policy by the next Labour Government.

"No incomes policy or wage control can revitalise capitalism when it has declined to the level that it has in this country."

Mr. Benn, MP for Bristol SE, called for greater party democracy, more public ownership and expanded public services. He also came out firmly against the Cruise missile.

"The Labour Party will not accept Cruise missiles in this country and we intend to see they are not placed in our territory."

He explained that the policy document called for detente and was opposed to the sale of arms to countries that might use them for internal repression.

He said the Chinese Government's views on the inevitability of war meant we should not be selling them arms.

On domestic policy, he told delegates: "It is by the expansion of the public services that we shall find new engines of growth in the 1980s and 1990s. We are in favour of investing directly in industry through public ownership as we did after the last war."

Full employment must be the first priority of the next Labour Government. Industrial re-equipment should be high on the list, trade must be planned and we should not accept a form of import controls imposed by unemployment.

"No Labour Government should buy back from private speculators assets built up by taxpayers money, over the years."

Mr. Benn also said that the next Labour Government would repeal the Employment Bill if it becomes law—a promise that exceeds statements in the Commons by party spokesmen.

"We believe and are arguing for industrial democracy," he said. "That will mean the re-establishment of full trade union rights which are threatened by the Employment Bill and we shall repeal it in its entirety."

Whatever the outcome of the negotiations in Brussels, the policy document committed the party to return lawmaking and tax gathering powers to the Commons.

He predicted that the next Labour Government would inherit a situation as critical as that of 1945.

It was time the Party spoke in a language which people understood. Some things were right and some were wrong. It was wrong to cut money for kidney machines while spending £5bn on the Polaris submarine.

Another NEC member, Miss Joan Lestor, MP for Eton and Slough, also opposed Cruise missiles being based in Britain.

A return to detente was essential, she said. We should not allow events in Afghanistan to drive us back to the days of the cold war.

Conference hostile to pay policy

MR. JAMES CALLAGHAN, the Opposition leader, demanded that the political and trade union wings of the Labour Party should try again to agree a basis for an incomes policy.

His plea that wages should be brought more in line with productivity was received coolly by most delegates and many were openly hostile.

Mr. Callaghan insisted that the policies in the "Peace, Jobs, Freedom" document which conference endorsed by an overwhelming majority, could not be achieved without an agreed basis for an incomes policy.

He did not define the formula he had in mind to produce the criteria "against which wage increases are to be measured" but indicated that he expected the relationship between inflation and the level of settlements to be taken into account.

He admitted that despite initial success, no incomes policy so far had been satisfactory. But the weakness of the current alternatives should not be forgotten.

Mr. Anthony Wedgwood Benn demonstrated that anxieties expressed from the floor on income policies were shared by at least some of those on the platform.

Other delegates combined bitter attacks on Mrs. Thatcher with laments that her presence in 10 Downing Street was due largely to the "winter of discontent" that was the byproduct of the last incomes policy advocated by Mr. Callaghan.

Healey urges party to ignore extremists

MR. DENIS HEALEY, the Shadow Chancellor, hit out vigorously at the party's Left-wing extremists after being subjected to a chorus of "out, out" as he made his way to the rostrum.

He warned that to win the next general election Labour would have to face reality, get inflation down and adopt the policies needed to rebuild manufacturing industry and the welfare state from the foundations up.

To a mixture of cheers and jeers Mr. Healey said: "We will not win the next election if instead of meeting the real needs of the British people we go on ideological ego trips, or accept the clapped out dogmas now being trailed by the toy town Trotskyites of the militant group."

He predicted a new round of U-turns by the Government before it left office and mocked and ridiculed the Prime Minister for the agility she showed in executing the about-turn over the imposition of sanctions against Iran. "Her opportunism is quite as strong as her conviction."

He condemned the Government's hesitation over extending financial support for the micro-processor industry initiated by the Labour Government through the Inmos project.

Unless the Government was careful, he said, the only robot in the British economy would be Sir Geoffrey at the Treasury, "a sort of robot kamikaze pilot driving the UK economy into an accelerating nosedive."

Mr. Healey urged that North Sea oil revenues should be used to restructure British industry.

Dr. David Owen, the former Foreign Secretary, ran into a storm of protest when he argued against a unilateral ban on the location of U.S. Cruise missiles in Britain.

Like Mr. Callaghan he contended that the exclusion of U.S. Cruise missiles from Britain should form part of a wider agreement requiring the withdrawal of the Soviet Union's SS-20 missiles targeted on the capitals of Europe.

Turning to his current responsibilities as Shadow Energy Secretary he urged the party to reach agreement on a balance of priorities for public expenditure projects so that the revenues from the North Sea were not frittered away.

Mr. Gavin Strang, MP for Edinburgh East, said Labour's threat to re-nationalise without compensation was not being taken seriously. He suggested that a more credible pledge would be that the price paid on re-nationalisation would be market value or the same as that paid by the owners at the time of purchase, whichever was the lower.

Unions challenge Tories

The unions will seek ways to get round the Employment Bill if it becomes law, warned Mr. David Basnett, general secretary of the General and Municipal Workers' Union.

"We will obey the law," he told the conference. "But if we cannot defeat the Employment Bill in the Commons why should not we develop anti-trades union law avoidance policies, the same as the rich develop tax avoidance policies."

The unions had to prevent the Conservative Government blaming others for the failure of its economic policies. The Labour movement had a democratic right to protest and demonstrate and should be prepared to repeat its May 14 tactics.

The policy document should be taken much further, he said. It reflected the policies of the last election and not the circumstances of the 1980s. The Government had put the welfare state on a care-and-maintenance basis and a Labour Government would have to rebuild it.

The Government sought a major shift in power away from working people and their organisations, he said.

The Trades Union-Labour Party liaison committee had to ensure that the policy of the next Labour Government did not founder at the first economic squall.

Mr. Joe Gormley, the miners' leader, said the party had to enter the next election with a manifesto that all could stick to. His union favoured the policy document but policies must be practical.

Mr. Clive Jenkins, ASTMS leader, said British manufacturing-based industry had suffered irreversible damage because of Government policies.

Companies were using borrowed money to meet daily needs.

Mr. Jenkins suggested that the Government was unlikely to remain in office for its full term. The effect of its policies were "self-ambushing" and it might also collapse due to pressures from industrialists and bankers.

Mr. Jenkins advocated a dual pricing policy for energy. Inflation would be eased if cheap oil, gas and electricity were available within the U.K.

If such a policy meant leaving the Common Market, "I would look upon that as a bonus."

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FT Monthly Survey of Business Opinion

GENERAL OUTLOOK

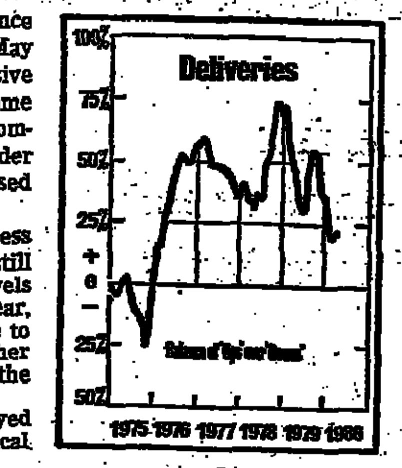
Slight gain in confidence

THE general level of confidence in industry improved in May for the second successive month, partly because some electrical engineering companies have stocked up order books as a result of increased defence spending.

The index of general business prospects is however still around the very low levels reached at the end of last year, and most companies continue to say that they are less rather than more optimistic about the outlook.

Of the three groups surveyed last month, the electrical engineering sector appeared more confident, while durable goods companies were less so. In the stores and consumer service group, the downtrend in consumer spending and slack retail trade made for a generally depressed outlook, although there was some optimism about a lower level of industrial unrest.

Confidence about prospects for the British economy improved for the second month running, although this was based mainly on the longer term view of future prospects rather than on any hopes of an immediate improvement.



GENERAL BUSINESS SITUATION

Are you more or less optimistic about your company's prospects than you were four months ago?	4 monthly moving total				May 1980		
	Feb. May %	Jan. Apr. %	Dec. Mar. %	Nov. Feb. %	Elect. Eng'g. %	nents & Distrib. %	Service Organs. %
More optimistic	25	24	18	24	16	5	26
Neutral	37	34	34	36	41	55	36
Less optimistic	38	42	48	40	43	40	38

EXPORT PROSPECTS (Weighted by exports)

Over the next 12 months exports will be:	4 monthly moving total				May 1980		
	Feb. May %	Jan. Apr. %	Dec. Mar. %	Nov. Feb. %	Elect. Eng'g. %	nents & Distrib. %	Service Organs. %
Higher	45	49	47	48	47	47	2
Same	21	22	29	30	26	1	38
Lower	32	27	22	22	25	52	30
Don't know	2	2	2	0	2	—	30

ORDERS AND OUTPUT

Little change in order books

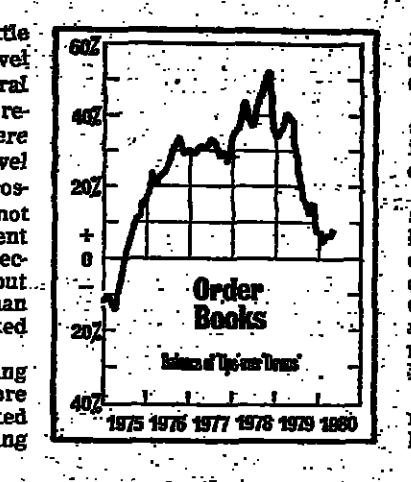
COMPANIES REPORT little change in the very low level of order books and general demand indicated by the previous month's survey. There continues to be a high level of pessimism about sales prospects, although this has not deteriorated further in recent months. All three sectors expected a lower increase in output over the next 12 months than they had done when last asked in January.

The electrical engineering and durables sectors were more inclined to say they expected order books to fall in coming months, while stores and consumer service companies forecast that they would increase.

The index for new orders also shows little change, with an improvement in engineering offset by a decline in durables.

High interest rates and the strong pound were reported as having affected the recent trend of deliveries. The stores sector complained that consumers' disposable income had been reduced by increases in rates, mortgages and nationalised industry charges.

Export prospects were judged more gloomy on account of the high exchange rate.



NEW ORDERS

The trend of new orders in the last four months was:	4 monthly moving total				May 1980		
	Feb. May %	Jan. Apr. %	Dec. Mar. %	Nov. Feb. %	Elect. Eng'g. %	nents & Distrib. %	Service Organs. %
Up	36	34	35	31	67	41	43
Same	20	21	19	21	15	18	17
Down	19	17	15	13	2	41	10
No answer	25	28	31	35	16	—	30

PRODUCTION/SALES TURNOVER

Those expecting production/sales turnover in the next 12 months to:	4 monthly moving total				May 1980		
	Feb. May %	Jan. Apr. %	Dec. Mar. %	Nov. Feb. %	Elect. Eng'g. %	nents & Distrib. %	Service Organs. %
Rise over 20%	5	6	6	5	—	37	4
Rise 15-19%	7	6	5	5	8	—	—
Rise 10-14%	5	11	14	16	2	—	—
Rise 5-9%	21	22	20	16	—	17	9
About the same	54	47	46	48	59	33	66
Fall 5-9%	1	1	—	1	1	4	4
Fall over 10%	1	1	1	—	—	9	—
No comment	6	6	8	9	30	—	17
Median change	4.2	4.8	4.9	4.6	3.4	6.2	3.4

CAPACITY AND STOCKS

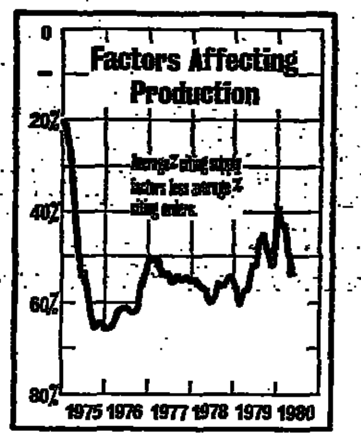
Recession forces de-stocking

The emerging recession is forcing companies to cut stock levels to meet weakening demand. All three groups surveyed reported that their levels of stocks in relation to sales trends, while remaining historically high, had fallen since the beginning of the year.

All three sectors were also less inclined to expect stocks of raw materials and components to decrease over the next 12 months.

The survey however shows that companies are still placing emphasis on the need to run a tight stocks policy, which indicates that stocks could be run down further in coming months. If this fall continues, it could mean that the de-stocking phase of the recession is coming to an end.

There continues to be little change in the index of capacity utilisation, which has recovered quite markedly since last autumn. This could be the result of companies lowering their planned sales/output levels in line with the onset of recession.



STOCKS

Raw materials and components over the next 12 months will:	4 monthly moving total				May 1980		
	Feb. May %	Jan. Apr. %	Dec. Mar. %	Nov. Feb. %	Elect. Eng'g. %	nents & Distrib. %	Service Organs. %
Increase	34	29	22	21	17	56	47
Stay about the same	36	33	35	39	46	34	23
Decrease	23	29	31	25	37	10	13
No comment	7	9	12	15	—	—	17
Manufactured goods over the next 12 months will:							
Increase	22	19	18	24	—	50	52
Stay about the same	45	40	36	36	43	31	36
Decrease	18	21	22	15	15	10	12
No comment	15	20	24	25	42	9	—

CAPACITY WORKING

	4 monthly moving total				May 1980		
	Feb. May %	Jan. Apr. %	Dec. Mar. %	Nov. Feb. %	Elect. Eng'g. %	Motor Vehicles Compo- nents & Distrib. %	Stores Consumer Service Organs. %
Above target capacity	6	7	9	14	15	—	—
Planned output	68	66	63	54	62	73	53
Below target capacity	25	26	26	30	20	27	43
No answer	1	1	2	2	3	—	4

FACTORS CURRENTLY AFFECTING PRODUCTION

	4 monthly moving total				May 1980		
	Feb. May %	Jan. Apr. %	Dec. Mar. %	Nov. Feb. %	Elect. Eng'g. %	nents & Distrib. %	Service Organs. %
Home orders	80	76	73	69	51	88	98
Export orders	50	44	43	43	50	70	43
Executive staff	9	12	11	9	41	—	—
Skilled factory staff	19	24	27	25	38	10	—
Manual labour	2	4	5	8	—	—	—
Components	6	11	11	15	—	1	—
Raw materials	19	19	17	9	15	—	—
Production capacity (plant)	11	11	12	11	—	—	9
Finance	2	2	2	2	2	4	—
Others	11	12	12	10	—	—	—
Labour disputes	26	32	35	31	23	5	9
No answer/no factor	8	7	2	7	30	9	2

INVESTMENT AND LABOUR

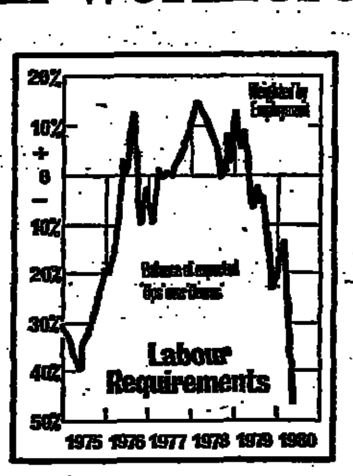
Big drop in workforce expected

EMPLOYERS OF more than half the labour covered by the survey expected their workforce to decline over the next 12 months. As a result, the index for employment prospects, which was already at a very low level, has slumped further, taking it beyond the previous low point seen during the 1975 recession.

Pessimism about the prospects for taking on labour was spread across all three sectors, with weakening demand rather than labour market problems cited as the main factor.

The index covering prospects for capital investment, which had been dipping sharply in previous months, recovered in May to around its levels of last autumn. Both the electrical engineering and the stores and services sectors were more inclined to increase spending over the next 12 months.

Fewer respondents than in the previous survey said that their liquidity levels were too low, bringing an improvement in this index too. Stores and consumer services were however more inclined than in January to say that they needed external finance for capital expenditure.



LABOUR REQUIREMENTS (Weighted by employment)

Those expecting their labour force over the next 12 months to:	4 monthly moving total				May 1980		
	Feb. May %	Jan. Apr. %	Dec. Mar. %	Nov. Feb. %	Elect. Eng'g. %	nents & Distrib. %	Service Organs. %
Increase	6	15	16	22	—	21	12
Stay about the same	35	36	37	38	47	11	7
Decrease	53	43	41	35	53	68	81
No comment	6	6	6	5	—	—	—

CAPITAL INVESTMENT (Weighted by capital expenditure)

Those expecting capital expenditure over the next 12 months to:	4 monthly moving total				May 1980		
	Feb. May %	Jan. Apr. %	Dec. Mar. %	Nov. Feb. %	Elect. Eng'g. %	nents & Distrib. %	Service Organs. %
Increase in volume	30	26	28	26	11	65	54
Increase in value but not in volume	22	19	15	16	55	4	16
Stay about the same	14	12	12	17	3	—	29
Decrease	32	36	33	26	28	31	1
No comment	2	7	12	15	3	—	—

COST AND PROFIT MARGINS

Renewed pressure on profitability

The index for profit margins, which had been improving, has dropped back again, although it is still above the level of last autumn. This was particularly on account of a more depressed outlook reported by the stores and consumer services sector and by the durable goods industry. High interest rates were mentioned as a principal factor depressing margins. Companies say they will have to increase prices by a median rate of just over 14 per cent over the next 12 months, slightly higher than previously.

Inflationary pressures from increased wages seem to be building up again, although companies report a continued levelling off of general unit cost pressures. The median expected increase in costs over the next 12 months is now running at just over 14 per cent against 14½ per cent in the previous month and 15 per cent in March.

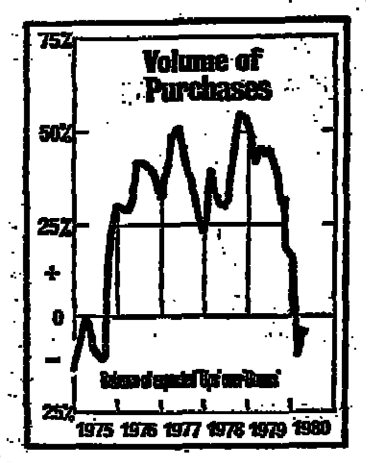
Expected increases in hourly wage rates are tending to converge in the range of 15 to 19 per cent. Companies report that they are now less willing to accommodate inflated wage demands from their workforces.

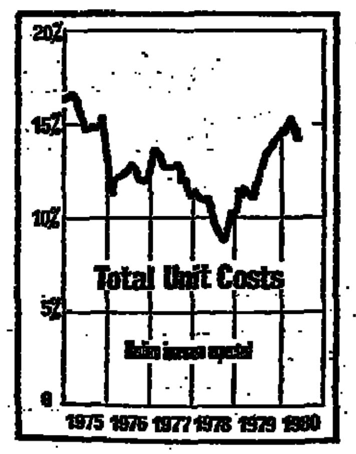
These surveys, which are carried out for the Financial Times by the Taylor Nelson Group, are based upon extensive interviews with top executives.

Three sectors and some 30 companies are covered in turn every month. They are drawn from a sample based upon the FT-Actuaries Index, which accounts for about 60 per cent of all public companies.

The all-industry figures are four-monthly moving totals covering some 120 companies in 11 industrial sectors (mechanical engineering is surveyed every second month).

Complete tables can be purchased from Taylor Nelson and Associates.





COSTS

	4 monthly moving total				May 1980		
	Feb. May %	Jan. Apr. %	Dec. Mar. %	Nov. Feb. %	Elect. Eng'g. %	nents & Distrib. %	Service Organs. %
Wages rise by:							
10-14%	11	13	17	18	2	19	—
15-19%	68	64	56	46	77	74	51
20-24%	13	14	16	14	—	4	23
25-29%	—	—	—	—	—	3	—
No answer	8	9	11	22	21	—	26
Median change	17.6	17.5	17.5	17.3	17.4	17.1	18.6
Unit cost rise by:							
0-4%	4	5	5	1	—	—	—
5-9%	5	6	3	3	5	—	—
10-14%	37	30	31	35	47	84	61
15-19%	32	30	31	29	32	7	25
20-24%	4	7	9	7	—	—	4
No answer	18	22	21	25	16	9	10
Median change	14.3	14.7	15.1	14.8	13.9	12.7	13.7

PROFIT MARGINS

Those expecting profit margins over the next 12 months to:	4 monthly moving total				May 1980		
	Feb. May %	Jan. Apr. %	Dec. Mar. %	Nov. Feb. %	Elect. Eng'g. %	nents & Distrib. %	Service Organs. %
Improve	43	46	36	32	32	4	17
Remain the same	28	27	34	40	47	69	39
Contract	25	23	26	25	6	27	44
No comment	4	4	4	3	15	—	—

LABOUR NEWS

Clegg 'made error over nurses' pay'

BY OUR LABOUR STAFF

HEALTH ministers are likely to be questioned today in the Commons on a report that, following its error over teachers' pay, the Clegg Commission has made a further mistake in its pay award to Britain's 490,000 nurses, whose leaders have warned of industrial action over pay this year.

Commission officials yesterday strongly denied an error, as did the National Union of Public Employees, to whom the report was attributed. But the allegation will do little to improve the already strained industrial relations atmosphere in the health service.

The report claimed the error had cost a staff nurse £247 a year. The total lost by all the nurses could be as much as £100m.

Mr. Stanley Orme, Labour's health spokesman, yesterday said he would take up the alleged error with Mr. Patrick Jenkin, Health Secretary, today.

If the allegation were correct, he would call for an immediate investigation. It would go a long way towards meeting the nurses' justifiable claim, he said.

Mr. Michael Brotherton, Conservative MP for Louth, said this latest piece of "crass ignorance" was a further encouragement to the Prime Minister to abolish the Commission.

The report claimed the Commission had made an error by making its award on the basis that nurses were already working a 37½-hour week, rather than the 40-hour week.

Clegg Commission officials yesterday dismissed the report. They said the award makes it perfectly clear that pay rates had been set in the knowledge that the nurses' working week is due to be reduced next year. The report says there will therefore be no adjustment needed when the working week is reduced.

Mr. Bob Jones, NUPE's national officer for the health service, said the Commission had not made an error. As part of the move towards a shorter working week, nurses were being paid normally for working 37½ hours, and paid a further £5 for 2½ hours at "plain" time, which was not an overtime rate. The unions were still pressing for an increase above the 14 per cent allowed for by cash limits.

Leader, Page 18

TUC plans fresh initiative on laggers

BY PHILIP BASSETT, LABOUR STAFF

LEADERS OF the electricians' and construction engineering workers' unions seem likely to come under strong TUC pressure this week to relax their stand in the inter-union dispute at the Isle of Grain power station site.

The sub-committee of the TUC's finance and general purposes committee is likely, possibly today, to put forward fresh proposals to solve the wrangle, which concerns bonus arrangements for thermal insulation workers, or laggers.

The most likely proposal is that the committee will recommend that laggers represented by the GMWU retain higher bonus rates than those of skilled craftsmen, but that the level of their rates be progressively scaled dow nin future.

This proposal could face opposition from the Electrical and Plumbing Trades Union, and Mr. John Baldwin, general secretary of the AUEW construction section, said yesterday that such a suggestion would be "completely unacceptable."

He was unsure of the power of the TUC General Council to compel the two unions to accept the GMWU's position, but added that the stance of both the GMWU and the TUC was becoming irrelevant.

The Central Electricity Generating Board was "totally committed" to levelling off the wages structure. This position was supported by the Government.

Mr. David Basnett, GMWU general secretary said yesterday, that he was confident that the TUC would again support his union. He has told Mr. Len Murray, TUC general secretary, that the TUC must inform the EPTU and AUEW that they must comply with the TUC's previous decision.

He said it was intolerable doing the work of GMWU members. Some 25 trainee laggers have been brought in at the Isle of Grain to take over the work of the 27 GMWU laggers who were dismissed last year.

GMWU officials are continuing to draw up plans for industrial action by laggers at all the CEGB's sites should no solution be reached in the Isle of Grain dispute in the two weeks' grace the GMWU has won.

Hoteliers turn down union plan

By Our Labour Staff

HOTELIERS in the Yorkshire resort of Scarborough have rejected General and Municipal Workers' Union proposals which might have led to union recognition for bargaining purposes, the union said yesterday.

As a result, the union has reaffirmed its year-old boycott of the town, which was previously a centre for many union annual conferences.

The union's keenness to recruit hotel workers manifested itself earlier this year when it formed a separate section, the Hotel and Catering Workers' Union, to help its campaign. It has been holding exploratory talks with Scarborough hoteliers for some time.

But at informal talks last week, Scarborough hoteliers refused to agree to union proposals for ending the boycott. The union yesterday said the hoteliers were not prepared to say they would recognise it even if it secured a substantial membership.

NUT backs teachers in books row

TEACHERS who refuse to take part in efforts to persuade parents to pay for children's school textbooks have been promised the support of the National Union of Teachers.

After disclosures that consideration is being given to raising funds to provide books, equipment and other facilities normally provided by local education authorities, the union has sent a note of guidance to its 862 divisions.

It says that fund-raising activities will not be sufficient or satisfactory to fill the gaps where expenditure cuts were seriously eroding important areas of the curriculum. "Such a serious situation should not be masked by parental efforts to paper over the cracks for fund-raising."

● Peace talks will begin today in the dispute in which Nottinghamshire teachers have staged a series of strikes depriving thousands of children of lessons. Leaders of Nottinghamshire County Council will meet representatives of the NUT to discuss the dispute over nursery class sizes.

Striking musicians discuss rival proms

BY ARTHUR SANDLES

BBC MUSICIANS, striking because of planned cuts to BBC orchestras, are being told that they cannot legally take part in a rival series of Promenade Concerts in six weeks' time if the strike is still on.

Alternative Proms are a possibility after talks between London's Capital Radio and the Musicians Union.

The BBC said last night that artists and musicians—and the Albert Hall—were all under contract to the corporation.

"We intend to continue with the final preparations for the Proms to be relayed by BBC television and radio and we confidently expect that they will take place.

"We do not contemplate any substitutions or rearrangements."

However, the BBC is rearranging its programmes and substituting records for live music. The musicians went on strike at midnight on Saturday after the failure of talks in the wake of BBC plans to cut five of its 11 house orchestras.

Capital Radio's Aidan Day and the Musicians' Union assistant secretary, Mr. Stan Hibbert, have already had preliminary talks. Mr. Hibbert says: "The Proms belong to the promenaders, not the BBC."

If the promenaders saw that an independent group was keen "to support the music in a way that the BBC is apparently not, then I am sure they would come along anywhere and give the Proms their traditional flavour."

"Capital's own willingness to support the Proms is joined by interest from other commercial radio stations and some individuals.

The problem of organising a series of concerts in such a short would be considerable, and the legal difficulties a serious obstacle.

FINANCIAL TIMES SURVEY

Monday June 2 1980

Canadian Banking and Finance

The Canadian chartered banks, a well-established power in international finance, face a double challenge this year: recession will make profits hard to earn, and a new regulatory act will bring more competition on to their home ground. In particular, it will allow foreign banks to set up subsidiaries in Canada which will enjoy full banking status.

Outlook in short term unclear

By W. L. Luetkens

PLENTY OF economic and political problems remain to plague Canada and its financial institutions after the defeat of the Quebec referendum on a mandate to negotiate sovereignty for the French-speaking province. But for the moment it has removed the single most worrying uncertainty on the Canadian horizon.

On the other side of the ledger, the short-term economic outlook remains murky, however strong Canada's underlying position may be as a net exporter of energy.

A recession is in prospect and, indeed, may already have begun. It will bring new problems for the chartered banks and similar institutions which were caught in an uncomfortable squeeze on spreads in the closing months of the 1979 and the beginning of the current calendar year. Banks countered by expanding assets and world business, but loan demand is now likely to recede.

The Canadian dollar is looking a good deal better with the Quebec referendum out of the way, but is not out of the woods yet. It remains vulnerable to any renewed increase of U.S interest rates. The U.S. recession is going to cut into export demand for Canadian goods, reducing the normally substantial merchandise surplus.

Energy policy remains the most immediate problem of economic management in Canada. A decision to increase deliveries of natural gas to the U.S. would immediately benefit external payments. But Ottawa seems to have decided instead to seek the more distant (though perhaps more substantial) benefits of import substitution. That will require pipelines to be built to carry gas to the East and reduce its oil imports.

Even the Quebec referendum has not removed all uncertainties from that area. The provincial Government of Mr. Rene Levesque is unlikely to take its defeat lying down. Moreover in some other provinces, too, there is pressure for devolution—an idea not necessarily popular with banks and other businesses that operate Canada-wide.

The one point to be quite clear about is that regardless of the outcome on May 20, the argument about the future of Quebec, and indeed about the constitutional future of Canada, will continue. Not only Quebec is restive: the West, newly wealthy as a source of oil and natural gas, is also champing at the bit, demanding more power for itself and the right to refuse to share its riches with the manufacturing provinces of central Canada.

By comparison the long drawn-out argument about unionism in banking is small beer. On the whole the banks have successfully resisted unionisation, which requires a majority vote in each branch wishing a union to be recognised as its representative.

The banks have been fighting this with a number of devices: in one case wage increases were withheld from branches where the union had won its vote, though the National Labour Relations Board quickly put an end to that. Fewer than 100 of the roughly 6,000 branches of the Canadian banks have so far voted to be represented by a union.

On the economic front the immediate outlook for business is poor. Canada did quite well last year, with growth of GNP of 2.9 per cent, helped by an excellent performance in export markets and by strong growth of investment in plant and equipment. For this year a good deal less is in prospect as commodity prices stabilise or even fall and as the U.S. goes into recession.

Subsidise

Canada's inflation rate of less than 10 per cent last year was lower than that of the U.S. though the figures are somewhat misleading. Canada, for instance, is heavily subsidising the domestic oil price so that the increase of energy costs is showing up in people's tax bills rather than in the Consumer Price Index.

Nevertheless, it proved possible for a while early this year to keep Canada's short-term interest rates below those prevailing in the U.S. without hurting the exchange rate of the Canadian dollar. Heavy inflows of direct investment funds into Canadian equities, mainly energy and other commodities, made that possible — but possibleonly within limits. Canadian rates had to follow the worldwide climb of rates last year and in the opening months of 1980.

That caused difficulties throughout the various financial institutions. Mortgage rates in Canada are traditionally renegotiated only once every five years and the interest rates on consumer credits are not especially elastic for both technical and political reasons. As the costs of re-financing went up the banks, and especially the trust companies, were caught in a squeeze on margins which cut into profits.

The trust companies (as explained in the article of this survey dealing with them) were especially hard-hit. Bankers, too, were eagerly waiting for the cyclical peak of interest rates. But they will have to face the fact that the steep reductions made in May were the harbingers of recession.

Loan demand from industry is unlikely to expand this year as it did last. The same goes for the consumer sector and especially housing. There is ominous news of heavy layoffs in the motor industry of Ontario.

These are all mainly short-term considerations. In the longer term, growth on the scale of last year's appears perfectly feasible. But much of it will be derived from the huge energy projects in the planning or discussion stage. These include a pipeline to move Alaskan gas to the main U.S. markets and to pick up western Canadian gas on the way; more of the gigantic plants required to extract oil from the oil sands of Alberta; and perhaps a power station to harness the tides of the Bay of Fundy in Nova Scotia.

And that is not all. Oil has been found off the coast of Newfoundland, though the quantities are not yet known; there is gas in the Beaufort Sea and the Arctic Islands. Altogether the financing need will run into many billions of dollars.

But first there has to be agreement on an energy policy, and more particularly on how to raise the domestic price of oil closer to world levels—and how the proceeds are to be shared between the federal Government, the provinces and the the industry.

Holdups could therefore occur. Certainly the government of Mr. Pierre Trudeau, which returned to power in February after eight months in opposition, has not shown any especial tenderness to business. A mini-budget in April imposed a 5 per cent surcharge on corporate income taxes at what, from a cyclical point of view, may have been the very worst moment possible.

Business is also uneasy about the federal deficit. As things stand about C$12bn will have to be borrowed during this year. Things have not been helped by high interest which caused many savers to cash in their savings bonds in favour of higher yielding securities.

Moreover, during the election campaign Mr. Trudeau injected an element of economic nationalism into his campaign, playing on traditional suspicion of the U.S.-owned multinational companies which control so much of the Canadian economy.

But this nationalist element has not touched the banks since the last revision of the regulatory Bank Act took effect in 1967. That revision in practice barred foreigners from controlling Canadian banks; now they are to be let in again by a further revision expected to have been passed by July or at any rate the end of the year.

In general outline, what is proposed is that foreign banks shall be permitted to found bank subsidiaries in Canada which, together, will be allowed to take a share of up to 8 per cent in the domestic lending of the Canadian banking system.

Flourishing

On the strength of present figures that would allow affiliates of foreign banks established in Canada to double their business volume. For it needs to be noted that foreign banks, though they may not found banks in Canada under the present regime, are entitled to pursue much if not all of the business of banking provided they do not use that term.

More than 40 such foreign-owned near-banks (or non-bank financial institutions to give the technical term) are in existence and seem to have been flourishing.

To offer them the full status of a bank—something that is jealously guarded in Canada—is intended to do two things. It is intended to bring some extra competition into the banking oligopoly and it will also make it easier for the federal authorities to keep tabs on the foreigners.

The initial proposal was made in a White Paper of 1976 proposing an entirely revised regulatory regime for Canadian banks. The next phase was a Bill tabled in 1978 under Mr. Trudeau which never got through the Parliament though both houses proposed a series of amendments.

Some of them were adopted in the Bill tabled last year by the Progressive Conservatives during their brief spell in office. Their Bill, with a few changes, has been re-introduced by the new Liberal Government.

Under these circumstances the Bill is likely to get an easy passage from the two main parties. The social democratic New Democratic Party may be more critical, and everyone may take the opportunity to complain about high interest rates. But that is not expected seriously to delay the Bill. The foreign near-bankers should be lining up for bank status proper late this year or early in 1981.

GROWTH OF THE CHARTERED BANKS
(C$m)

	Total assets	Foreign exchange Assets	Foreign exchange Liabilities
1970	47,307	13,691	13,533
1971	54,428	14,469	14,162
1972	63,222	16,572	17,018
1973	79,754	23,298	24,577
1974	97,015	28,534	29,353
1975	108,378	31,209	31,461
1976	126,403	37,614	38,303
1977	150,477	47,658	48,664
1978	189,100	66,972	68,700
1979	229,151	81,865	85,024

Figures for year ends.

CONTENTS

Energy investments expected to double

CANADA IS entering an energy boom which will cause energy investments to double as a proportion of GNP over the next two decades. Foreign capital markets will be called upon to produce about 25 per cent of the financing required each year.

The sums needed will be huge. A recent study by the Royal Bank of Canada — judged by economists at the federal Department of Energy, Mines and Resources to be the most authoritative estimate publicly available — puts total requirements in the period from 1979 to the end of the century at C$1,400bn (£516.6bn), of which about C$350bn will come from abroad.

Of the total amount, Mr. Daryl G. Waddingham, senior energy adviser at the Royal Bank, estimates about three-quarters of the investments will be made in the last decade of the century and only one quarter this decade. His forecast of requirements in the 1980s is almost identical with an estimate prepared a year ago by Toronto-Dominion Bank.

The question that must face Canadian energy planners is whether this schedule can be adhered to. The Royal Bank says succinctly that the size, scale and technological complexity of many of hte projects that will be mounted by the energy developers present financial institutions with "difficult and possibly unacceptable levels of risk.

"Portfolios of the lending institutions may become top-heavy with certain types of energy investments and technological and market risks may dictate the need for governmental guarantees, financial consortia or new innovative forms of finance."

Furthermore, even though foreign financing may be needed for only 25 per cent of Canada's energy financing requirements, it may be harder to obtain than in the past. The U.S. is expected to allocate increasing flows of domestic savings to its own energy projects and Mr. Waddingham says that the ability of the U.S. to sustain large-scale capital exports is suspect. Thus Canada might find itself turning to Europe or whatever market OPEC oil dollars are being recycled in for an increasing share of its financing.

Deteriorate

The Royal Bank calculates the inflow of foreign capital to finance energy investment will cover about 79 per cent of Canada's current account deficit in the 1980s but only about 67 per cent in the 1990s because the current account is expected to deteriorate severely in the latter decade.

Forecasting probable capital flows to the energy sector, particularly to petroleum and coal, is being made more difficult by the policy of the recently-restored Liberal Government. The Energy Minister, Mr. Marc Lalonde, hopes to reduce foreign ownership in the Canadian oil industry from about 75 per cent today to 50 per cent by 1990. The timing and means by which he hopes to achieve this have not been spelled out, but they are likely to result in outflows of energy sector capital during the 1980s.

Mr. Edward Brown, legal adviser for Dome Petroleum, the Calgary company spearheading the Beaufort Sea oil exploration effort, suggests that the problems of financing new large-scale energy projects require new laws and regulations which will permit the development of new means of project financing. At current high interest rates, he suggests some form of after-tax financing is required.

Mr. Brown and other legal experts on energy financing cite a number of problems facing Canadian projects. Jurisdictions often overlap, securities regulations are not the same from one Canadian province to the other, U.S. law may be applied extra-territorially in certain cases and obtaining regulatory approval for projects is uncertain, costly and slow.

The experience of three of the major energy projects now being planned support this gloomy assessment. The Alsands tar sands plant, being planned by a consortium headed by Shell Canada, will probably not come on stream until 1987 as full bore construction of the plant is being held up pending an agreement among the company, the federal Government and Alberta over taxes and royalties. The Alaska Highway gas pipeline, including the prebuilding of the southern end, still awaits the final regulatory go-ahead in both Ottawa and Washington. And the environmental hearings in Imperial Oil's heavy oil project at Cold Lake were held up for several months so that local farmers could plant and harvest their crop.

Self-sufficiency

But while hydrocarbon projects receive most of the attention—and the Canadian Petroleum Association warned recently that Canada will not meet by 1990 its goal of self-sufficiency in oil if projects are slowed down unduly in the first half of the 1980s—they are not the largest users of energy capital. Electrical utilities will take half the total requirement or about C$710bn to the end of the century. Of this about C$200bn will come from foreign sources, about C$300bn will come from Canadian debt markets and the remainder will be generated internally.

Oil, gas and coal will take the second largest amount of capital—an estimated C$530bn. Even though the industry will generate proportionately slightly less of capital internally than it has in recent years—mainly because of the heavy debt ratios of tar sands plants and heavy oil projects—it will ned external capital of about C$170bn, of which C$80bn might come from offshore.

The expansion of gas distribution systems as natural gas is substituted for oil and the building of new oil and gas pipeline projects are each expected to take about C$80bn to the end of the century. About C$34bn is expected to come from foreign sources. The Polar Gas Pipeline project would altogether add about C$47bn to Canadian energy development in the next two decades.

While bank and government economists prepare their predictions of the heavy investment schedule for Canadian energy development in the last two decades of the century based on their forecasts of probable output of the major energy sources, it is not clear whether government is capable of making the policy decisions necessary to mount such a large-scale development effort.

The goal of Canadian self-sufficiency in oil by 1990, a target set by the short-lived Clark Government, would require a massive effort. While the Liberals still hold to self-sufficiency as the goal, Mr. Lalonde has dropped all mention of a specific date by which self-sufficiency should be reached.

Canada would need, in the view of the Canadian Petroleum Association, to bring a minimum of 500,000 barrels of oil a day on from frontier regions, widespread initiation of enhanced recovery schemes, maximum development of heavy oil and oil sands and effective constraint of demand. The CPA's price tag on such development is $260m in the 1980s.

Fro mthe industry viewpoint, the key to development is government policies which ensure that adequate production revenue remains availabel to the industry initially to plough back into the development of new supplies. The oil price understanding that was worked out between the Clark Government and Alberta which would have given the industry a cash flow of C$33bn to 1984 was seen as providing a good basis for development.

Uncertain

The industry though is uncertain whether it will get the same generous treatment from the Liberals, who came to office on the campaign pledge that oil price increases under a Liberal Government would be less than those agreed to by the Tories. Mr. Lalonde appears intent on fine-tuning the industry by instituting a blended oil price system that would set prices to producers for each type of domestic oil on a rate of return basis.

Wariness with which the industry regards the plans has been reinforced by a decision by Mr. Lalonde to enforce a force majeure clause in the royalty and taxation agreement with the Syncrude oilsands plant. The Government will renegotiate the pricing agreement with the plant so that it no longer gets the world oil price.

The fear is that the Liberals' desire to hold down oil prices to the Canadian consumer and to head off high profits will mean that the Government will put the oil and gas business in Canada on a public utility basis. Not only is such a philosophy foreign to a high-risk business like oil exploration and development, it would also change the financing requirements of the industry. More debt capital than currently forecast would be needed as the industry moved away from its traditional ratio of about one-third outside financing.

The Liberals have also dropped Conservative plans to create a Canadian enerby bank to which new federal revenues of about $1 a barrel a year from domestic oil price increases would be siphoned off. The bank would have financed energy development across the country.

Jim Rusk

Trust groups hard hit by interest rate

THE BELEAGURED managers of Canada's trust companies endured the first few months of 1980 in a state reminiscent of prisoners under interrogation who are surprised to discover that the latest torture has not yet finished them off, and suspect that the next one probably will.

The squeeze in which they were caught derived from the precipitate rise in interest rates in North America. Rates have now begun an equally steep downward course. But there is no certainty that rates may not undergo an at least temporary correction.

Over and above that, the long-prophesied North American recession appears to have begun and is likely to cut down demand for housing in Canada. In effect both the recession and the preceding period of high interest rates have been very bad for the basic business of the trust companies which is to lend people money to buy homes.

At times while pressures were at their worst much of the trust company industry actually withdrew from this sort of business.

Reluctance

This seemingly suicidal manoeuvre occurred as North American mortgage rates soared to formerly undreamed of levels. Some companies opted out altogether. Others discouraged customers from taking on anything more than renewable one-year deals, as against the previously usual five years. One company began to promote a previously unheard-of six-month renewable mortgage.

Such reluctance to do business is a far cry from the normal battle for market share. But it is a direct result of what the Governor of the Bank of Canada, Mr. Gerald Bouey, recently described as an "astonishing" series of interest rate jumps in the early months of the year.

What is perhaps more important for the health of the industry is that this year's breath-taking acceleration of the upward movement of interest rates was not a sudden explosion from depressed levels. It came as the climax to a long series of repeated, although more moderate, increases.

In its annual report for 1979, Canada Trustco Mortgage reminded its shareholders that the rate of interest paid on its personal savings accounts was raised five times in the year, to 12 per cent from 9 per cent. Subsequently it went even higher.

The 1979 increases helped reduce Canada Trustco's effective interest rate spread last year to 1.54 per centage points, from 2.12 points in 1978.

Damage

This kind of experience throughout the industry contributed to an over all 17 per cent drop in operating profit of the 10 large publicly-traded companies in their fiscal years ending in 1979. Interestingly, it only partially reflected the dramatic rise of interest rates during the fourth quarter of the calendar year, because two of the 10 have fiscal years ending October 31. The worst damage from the final quarter is yet to be seen.

Within this overall pattern there were wide variations in the fortunes of individual companies, but none could be said to have done well. The performances ranged from a 53 per cent profit decline for the smaller Nova Scotia Savings and Loan to a 3 per cent gain for the largest company, Royal Trustco. But the latter and Canada Permanent, which registered a 1 per cent increase, were the only two to show any gain on the year, however modest.

The differences in performance closely match the degree of interest-rate sensitivity inherent in each company's mix of assets and liabilities, not relative sizes. Among the big three, Canada Trustco did worst, with a profit decline of 24 per cent. This contrasted with the modest increases shown by close rivals Royal Trustco and Canada Permanent.

Canada's trust companies run a classic financial intermediary operation. Most of their profits come from the basic mortgage spread business, with deposits bought from savers and investors with one hand and lent with the other hand against property mortgages.

For years they have fought a losing battle to maintain a comfortable spread on which to live. They used to have the residential market pretty much to themselves, but in recent times the banks have moved aggressively into this area and cut back the spreads for everybody.

Some companies have tried diversification. Royal has moved into banking in Florida in a substantial way, buying up banks in the state. Canada Trustco recently began moving into the banks' home territory by offering commercial loans directly. Many of the companies are trying to build up their consumer loan business.

There have been some notable mergers. A group that had the major shareholdings in Victoria and Grey Trust and in Metropolitan Trust fought off a raid from outsiders, then put the companies together as VGM Trustco.

The marriage has had its difficult moments, principally because of the difference between Metro's freewheeling management style and the more conservative approach of the venerable Victoria and Grey. VGM took some big writeoffs for actual and potential loan losses last year as the Victoria and Grey philosophy and management prevailed.

Marketing style

A Quebec group, Prenor, is consolidating its control of the big Trust General du Canada, which itself acquired a majority interest in smaller Sterling Trust of Toronto.

Meanwhile, a western-based group acquired control of Toronto-based Crown Trust from a rising young financier, Mr. Conrad Black. Crown was probably the most traditionally-minded of trust companies, but its marketing style has been noticeably jazzed up by the new-comers.

Despite all this, the principal influence on the companies' bottom line is still the interest rate cycle, with varying effects on the companies according to their ability to manage their individual asset and liability mix.

The fiveyear renewable mortgage (bearing an unchanged interest rate for those five years) has been the basic staple for many years. It was developed in the late 1960s when increasingly volatile interest rates made the 20-year fixed rate mortgage unpopular.

These days, however, even five years seems too long. When interest rates climb two or three points in a quarter, companies with a lot of fixed-rate five-year assets, financed by much shorter term liabilities, get badly squeezed. For the past year more than half of the new business has been in mortgages with terms of less than five years, as companies sought to reduce their exposure.

One helpful factor last year was the booming Canadian stock market, which swelled income from teh traditional stock transfer business.

Another was the sharply lower tax bills experienced by companies that bought floating-

CONTINUED ON NEXT PAGE

Profits of chartered banks slow down

THE CHARTERED banks of Canada, the country's largest financial institutions, with a well-established international presence, are recovering from a bad start to the current year. Spreads came under pressure, which has eased with the steep decline of interest rates, but recession will cut loan demand.

On the regulatory front, the year will probably at last produce a new Bank Act. It should have come into force in 1977, but has been delayed for a number of reasons of a political nature. When it comes, the new Act will slightly extend banking powers to include factoring and leasing. It will also allow foreign banks to set up banking subsidiaries in Canada, a matter dealt with elsewhere in this survey.

Rather paradoxically, bank profits have become something of a political issue in Canada at the very moment when their growth has been slowed down sharply. In the year of account to October 31 1978 profits of the chartered banks as a group went up by more than a third.

They were pushed along by the decline of the Canadian dollar, as a result of which the considerable U.S. dollar assets of the banks appreciated in terms of Canadian dollars; and by a tax-saving device, the so-called loan substitutes. These were floating or fixed rate preferred shares, the yield of which is tax-free to Canadian corporations, which the banks took into their portfolios in place of straightforward commercial loans.

Topical

That loophole has been closed and the exchange rate has been a good deal steadier.

Last year profits rose by only 13 per cent and little more is expected in 1979-80. Pressure on spreads so far has been counteracted by increasing assets and international business. But the period of high interest made bank profits topical. One Cabinet Minister has spoken publicly of the possibility of an investigation, but his views are not apparently shared in the Ministry of Finance, under whose responsibility banking comes.

The fact of the matter appears to be that for most of the chartered banks rising interest rates proved a cause of problems rather than one of joy. A main reason is the relative inelasticity of interest receivable from consumer loans and mortgages, which play an important role in the banks' portfolios. About one third of their outstanding general loans are personal loans, and mortgages account for 8 per cent of their assets.

At the same time the banks' customers have shifted money from non-interest-bearing current accounts into savings and deposit accounts. Under the pressure of competition for funds, partly from trust companies, the chartered banks have been moving towards paying interest on what are to all intents and purposes current accounts.

For instance, this spring one bank began to offer free cheques and 3 per cent interest on a type of savings account, provided a minimum balance of C$200 (about £76) is maintained. Interest is calculated daily—not on the lowest balance during any one month.

Given the oligopistic structure of the Canadian banking industry, where one bank leads the others are almost sure to follow, though each one may offer its own special variations.

These, then, are the reasons why spreads narrowed during the rapid rise of interest rates that were set off by anti-inflationary measures in the U.S.

PERFORMANCE OF MAIN CHARTERED BANKS

		Average assets (C$m)	Net financial spread (%)	Balance of revenue* (C$m)
Bank of Montreal	1978	28,192	2.97	193.5
	1979	35,230	2.53	228.7
Bank of Nova Scotia	1978	24,317	2.66	153.9
	1979	30,562	2.32	180.9
Toronto Dominion	1978	31,031	2.53	129.2
	1979	25,798	2.22	160.4
Canadian Imp. Bk. of Commerce	1978	34,451	2.68	193.5
	1979	42,126	2.27	201.3
Royal Bank	1978	37,514	2.81	223.9
	1979	46,847	2.36	270.7
Mercantile Bank	1978	2,149	1.77	15.0
	1979	2,711	1.68	22.3
Bank of British Columbia	1978	1,315	3.28	5.3
	1979	1,791	2.78	6.7
National Bank†	1978	11,857	2.83	48.6
	1979	14,319	2.27	32.7

The banks' years of account end on October 31.

* Balance of revenue after tax. † Figures recalculated from Bank Canadian National and Provincial Bank which have merged as National Bank of Canada. Source: Dominion Securities.

This source of pressure eased as interest rates fell in May though many analysts believe that rates may switch back at least temporarily. The change coincided with a recession in the U.S.—which Canada may undergo in more moderate form but cannot avoid. Loan demand will suffer, so that little can be expected in the way of asset growth in the second half of 1979-80.

But last year's asset growth will work in the banks' favour so that the last quarter's results should be good. For the year to October 31 analysts forecast profit growth roughly like last year's, with a good 1981 to come.

Last year was notable for the merger of the two so-called French banks, Bank Canadian National and Provincial Bank of Canada, whose business is to a great extent concentrated in French-speaking Quebec. The merger in due course should permit economies to be made by the elimination of certain duplications, but for the moment it has contributed to the costs of the National Bank of Canada as the new bank is called.

Besides rationalisation there were other reasons for the merger. Bank Canadian National held 30 per cent of its assets in mortgages and consumer loans and was thus caught early in the squeeze of rising rates. Moreover the bank formed by the merger, National Bank of Canada, found it necessary to add considerably to loan loss provisions after reviewing its loan portfolio early this year. As a result, first-quarter profits at National Bank during 1979-80 were only a fraction of what the two unmerged banks had earned together a year earlier.

Squeeze

Profits have also taken a tumble at IAC, a finance company which is in process of transforming itself into a chartered bank as Continental Bank of Canada. Here, too, the costs of transformation have proved heavy and the company has been caught in the squeeze between rising money market rates and the return on its consumer leanding. Both IAC and Bank National evidently stand to profit from the turning around of interest rates once it has firmly come about.

Probaly the most aggressive tactics have come from the Bank of Montreal which has expanded its international business forcibly. The latest instance is an agreement to buy Brascan's Brazilian banking affiliate with assets equivalent to U.S.$320m.

Bank of Montreal last year had the highest return on shareholders' equity among the Canadian Big Five. But it also has made greatly-increased provisions against loan losses.

It says they are intended to prepare for the possibility of increased losses arising from consumer loans as the recession begins to hurt. (These provisions do not accurately reflect actual loses: they are based on a five-year average and by themselves provide little evidence of what is going on. But sudden changes do indicate that something has gone wrong, or that there is at least a danger of losses.)

Question mark

The danger of loan losses in a recession is evidently not peculiar to the Bank of Montreal. So another question mark hangs over the profitability of the Canadian banks, at least this year. One particular special situation appears to be well under control. The net amount at risk in Iran is believed to be closer to C$300m than C$400m, which is a small amount when compared with the chartered banks' aggregate assets of C$230.5bn.

The revision of the Bank Act is a regular Canadian ritual; in theory it takes place every 10 years, but delays are not unusual. The current Act was to have expired in 1977, but prepartory work took longer than expected and two elections, one in 1979, one last February, further held things up. The general pattern of the proposed legislation has not changed greatly since the White paper of 1976. Before going over some of the detail it is best to look at the Canadian banking system in general outline.

Like Britain, Canada has multi-branch banks entitled to business throughout the country (and abroad). In general they are confined to banking or similar activities: they are thus quite unlike the universal banks of the German-speaking world, for instance, with their widespread industrial holdings.

The current Bank Act entered into force in 1967. It brought about a far-reaching change by abolishing a 6 per cent limit previously imposed upon the interest rate banks were allowed to charge. That opened up to them the field of consumer credit, which proved to be an important growth area.

The Bill tabled this April is unlikely to have effects quite as far reaching. (The decision to allow foreign-owned bank subsidiaries has in practice already been anticipated: the foreign banks are established in Canada through affiliates which engage in many forms of banking, but may not describe themselves as banks.)

The main new activities which the Bill proposes to open up to the banks are leasing and factoring. Leasing is restricted to financial leasing proper, and the banks are not to be permitted to direct the lessee to a particular supplier of the goods to be leased.

The banks are trying to reverse a defeat in the original hearings when they were refused the right to increase mortgage lending above the existing ceiling of 10 per cent of deposit liabilities and debentures.

They were also refused the right to sell data processing without any restriction. Such services will have to be "bank-related," and the onus to prove the relationship is on the bank. An obvious possibility is the making up of payrolls on behalf of corporate customers.

The entire system of reserves which the chartered banks must maintain with the Bank of Canada will be revised once the Bill is in force. The overall effect will be to reduce these non-interest-bearing reserves. The precise amount will depend upon the composition of bank portfolios, but if the new formula is applied to the banks' present mix of liabilities, about C$1.5bn or a third of the present reserve liability will disappear.

To the chagrin of the banks, reserve requirements will for the first time be applied to foreign currency deposits made by Canadians and booked in Canada, though there is nothing much that can prevent a bank from booking these deposits at a branch abroad.

Monopoly

The banks' present monopoly over the clearing system is to be abolished. Instead there is to be a Canadian Payments Association to handle clearing and prepare for the eventual introduction of electronic fund transfer including, on day, point of sales outlets. Installed in retail shops, these would permit the instant transfer of the amount of a customer's shopping bill from his account to the shopkeeper's.

Membership in the association is to be open to financial institutions other than banks, chiefly trust companies and credit unions. The banks wanted to subject them to the duty to maintain reserves with the Bank of Canada, but they will, instead, be allowed to maintain working balaces elsewhere which will bring the interest.

On the face of it that looks unfair, but the trust companies argue that they deal with longer-term deposits than the banks generally do and also maintain higher capital ratios.

All in all, therefore, the Bill fits in with the declared intention to encourage more competition. But the changes proposed are cautious and, moreover, the giants of the industry are too well established to make profound changes likely.

W. L. Luetkens

Trust groups

CONTINUED FROM PREVIOUS PAGE

rate term preferred shares of Canadian corporations from banks that originally acquired them. No tax is payable on dividends paid fom one taxable Canadian corporation to another. These purchases also increased the proportion of floating-rate assets on the balance sheet, and helped offset the interest cost squeeze on fixed-date assets.

Neither of these factors will be as important this year, it seems. Canadian stock prices, after a rollicking January and February, have tumbled sharply. They may recover some ground, but it seems unlikely that they will sustain their strength in a year that should see the onset of a substantial economic recession in the U.S.

At the same time, a number of companies have had their thirst for the term preferreds slaked because they are running out of taxable income to shelter. In addition, there will be very few new issues of this type because of changes in the tax rules.

So the 1980 outlook for trust companies, big and small, depends more heavily on interest rate movements than in many recent years.

If the peak has been passed and rates move down quite sharply in the second half, the industry may not do all that badly. If the top of the cycle is delayed, however, or if rates come down slowly, this will probably be a year that the industry will want to forget. For some of the weaker brethren, particularly the small trust companies entirely dependent on the residential mortgage market, 1980 will be a voyage to oblivion.

Hugh Anderson

Foreign bank subsidiaries close to gaining full status

A BILL enabling the financial affiliates of foreign banks to be given bank status in Canada looks at last like becoming law this year. Two previous bills fell by the wayside when Parliament was dissolved in the spring and again in the winter of last year.

It seems now that the Bill will go through in time fore the first foreign bank subsidiaries to receive their licences from the Minister of Finance late this year or, more probably, early in 1981. The queue will be a long one: more than 40 applications are expected, nearly all of them on behalf of near-banks already established in Canada.

As such they may engage in most forms of banking, but may not call themselves banks. Nor do they have access to the Bank of Canada as lender of last resort.

Phenomenon

With few exceptions these foreign-owned near-banks are in the wholesale market and probably intend to stay on that side of the business. While small when compared with the size of the Canadian chartered banks, the foreign-owned institutions have been growing apace. At the latest count foreign-owned near-banks had aggregated assets of C$6.4bn (£2.36bn). They had increased by 42 per cent within a year as the foreign-owned institutions jockeyed for position in expectation of being permitted to operate as banks.

Whereas these figures are an accurate reflection of the rough size of these near-banks, and even more of trends, they entirely ignore the phenomenon of the so-called suitcase bankers. These are men who work in Canada on behalf of foreign, largely U.S. banks, without establishing a corporate presence in Canada at all.

The size of this business is by its very nature hard to tell. Estimates have been published that foreign banks, through near-bank affiliates and suit-case bankers, have a share of 12 per cent in commercial lending in Canada. But that figure should be treated with reserve.

By far the largest of the foreign near-banks established in Canada are U.S.-owned. Citibank's two Canadian affiliates are in the lead, followed by two corporations owned by Chemical Bank.

Easily the biggest European-owned near-bank established in Canada is Barclays Canada which has just topped the C$500,000 mark in assets and has raised capital to C$35m plus retained earnings of C$6m. Smaller but noe the less sizeable presences are also maintained in Canada by National Westminster, Standard Chartered, the Midland, and Lloyds.

Given that these and other foreign banks are in fact already operating in Canada, though not with bank status, it is remarkable to ask why the majority should be planning to apply for bank licences once the law allows it. There is nothing in the proposed legislation that would necessarily terminate their continued existence as near-banks.

The answer is that several incentives for applying for bank status are built into the proposed legislation. In the first place it says that foreign banks shall not undertake banking business "directly or indirectly" in Canada, except through a licensed foreign banking subsidiary.

The word "indirectly" was written in, in an attempt to catch suitcase bankers. It is accepted in Canada that this provision will remain more or less a dead letter if any foreign bank decided to ignore it.

Ottawa has not interest in making too much of an issue here, since Canadian banks also ply the suitcase trade, in their case largely beyond the U.S. border.

Licence

Suitcases apart, the Bill says that the affiliate of a foreign bank in Canada may not both make loans and accept deposits transferable by cheque or order unless it has a bank licence. In the main that would hit intending retailers. Institutions financing themselves on the money market but not taking deposits would escape.

The most powerful reason for applying for a bank licence is a provision that a foreign-owned financial institution shall not be allowed to borrow with the guarantee of its parent bank unless it itself has Canadian bank status. The absence of such a guarantee would make its borrowing more expensive in the highly-competitive money markets.

The reasons for applying for a licence have been discussed here at some length because the regime proposed for foreign bank subsidiaries, or Schedule B banks, is in certain respects restrictive, and will be onerous in some cases. For a start, the Schedule B banks will be limited to a share of 8 per cent of the domestic lending of the entire Canadian banking system.

On the strength of the present figures, that would allow the foreign-owned institutions roughly to double their present aggregate size.

Approve

The original intention to limit each Schedule B bank to domestic assets of at most $500m has been quietly dropped. The proposal now is to fix the limit at 20 times authorised capital. No maximum figure is explicitly laid down for the latter, but the Minister of Finance will have to approve increases from case to case.

Schedule B banks as well as their foreign parents will be forbidden to own more than 10 per cent of the shares of Canadian non-financial corporations. (A similar ruling already applies to Canadian-owned banks.) Where such holdings already exist they will be legitimised by "grandfathering." This provision could cause problems for Continental-style universal banks. But one British bank, the Midland, is also affected.

The Midland owns the Thomas Cook travel bureaux in Canada, which will be grandfathered. But there is no clear answer yet to what will be done about Cook's travellers' cheques. If they are deemed to be a banking operation, they could perhaps be integrated into the Midland's Canadian bank affiliate once it has received its licence as a bank.

A key provision of the proposed legislation demands that before a Schedule B licence can be given the Canadian authorities must be satisfied that the regulatory body in the home country of the parent bank grants reciprocity to Canadian banks both in law and in administrative practice. That could cause difficulties both in Japan and in Switzerland. In the case of Britain no difficulties are expected.

The granting of Schedule B licenses is a matter within the discretion of the Minister of Finance, and a safeguard has been built in to ensure that reciprocity granted by other countries is maintained in fact as well as in theory. Licences will run for a maximum of three years at a time. They can be renewed, but do not have to be. So there is a threat that a licence may be allowed to lapse: only it would be a very bulunt instrument indeed, to be used only in extreme circumstances.

From the point of view of the Canadian authorities, the purpose of the reform is a dual one. First, the Bill is clearly intended to bring the foreign-owned near-banks under the control of the central Government in Ottawa and its institutions, the Inspector-General of Banks and of the Banak of Canada as the authority over monetary policy.

Not that they have been uncontrolled so far: provincial rules apply to them, and in some cases capital ratios have been more stringent than they will in practice be for a Schedule B bank.

Competition

Second, within the limits outlined, the Canadian Government is adhering to the objective originally outlined in a White Paper of 1976 which called for more competition in banking.

Altogether the legislation as now tabled does not differ greatly from the original White Paper. Changes made by the Progressive Conservative Government which was in power from May 1979 until February 1980 have been incorporated in the Bill as it now stands. Technical changes only have been made in the Tory Bill.

Under these circumstances it is probable that the Bill can be passed without too much argument in committee.

W. L. Luetkens

Oil find rumours add to stock market rally

THE CANADIAN stock market has passed through one of the most extraordinary periods in its history.

The winter rally which brought the key Toronto stock exchange 300-index up nearly 50 per cent to a new peak finally succumbed at the end February to record short-term interest rates in Canada and the U.S. Then, after a spectacular sell-off on March 27, the market recovered a little as the shock of short-term money costs receded.

The Canadian economy had a strong third quarter and corporation profits jumped sharply and again in the fourth quarter. Dividends were on the rise, and the energy development scene was once again very active.

There were rumours of new conventional oil finds in the west, but the big subject of speculation was the extent of reserves found in the Hibernia and Ben Nevis offshore wells nearly 200 miles out in the Atlantic off St. John's Newfoundland.

While government and some industry sources were careful to say there was only a 70 per cent probablity the wells were commercial, it was possible that they could be brought on stream swiftly with existing North Sea technology and that reserves might be sufficient to displace imports significantly.

Gulf Canda, one of the major participants in the wells, has a relatively small float listed on the Canadian stock market and it didn't take long for its price to double.

Other domestic factors fuelling the markets were the better-than-expected economic performance in the third and fourth quarters, a better merchandise trade surplus, rising dividends and the ability of a substantial amount of new equity to be raised through the market in 1979.

Inflation was running at just under 10 per cent according to the consumer price index, and few heeded the growing difficulties of the U.S. economy and the inability of the first round of Volcker measures to check inflation.

Some of the steam of the winter rally was provided by European and American institutional and private investors. It is estimated that several billion dollars came into Canada during the winter, helping to drive the TSE-300 index up to a peak level of nearly 2,200 on February 29, with 3,706 in the golds, 2,404 in the metals and minerals, 5,156 in the oil and gas index, 1,920 in the paper and forest products stocks, and 1,346 in industrial products.

The rise in the golds and metals and minerals mirrored broadly the run-up in the free market gold price to US$ 855, the phenomenal rise in silver (of which Canada is a major producer), and strong prices in many other precious and base metals. Generally the metals-producing sector had a record rise in earnings last year.

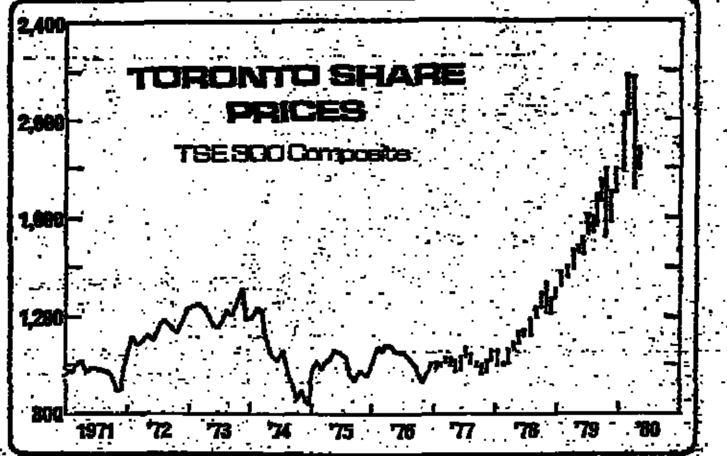
The market correction in March coincided with a sudden cut-off in the inflow of outside funds and the decline in commodity prices as the Americans lifted their short-term interest rates to a peak 20 per cent.

Absorb

However, Canada was able to absorb some of the shock relatively easily because the inflow of short-term capital had produced a temporarily strong Canadian dollar, allowing the Federal Government and the Bank of Canada to keep Canadian short-term rates between two and three percentage points below those in the U.S.

There were some difficult moments as the Canadian dollar weakened at one point to nearly 83 cents (U.S.), but the Bank of Canada went to a floating bank rate tied to Treasury Bill rates, supported the Canadian dollar in the market, and in late April and May interest rates in both countries were receding again, suggesting that any impending recession might be brief and not too deep.

Towards the end of May, the TSE 300 was standing around 1,850, up from the March 27 low of 1,703, with most other indexes showing similar resiliency. Generally, with Canadian real growth expected to be about 1 per cent this year, further delays in major Western energy projects, negative growth in the U.S., Canada's main export market, stocks are expected to move sideways for much of the year.



Canadian stock markets expanded strongly in 1979. While the Montreal exchange consolidated its position, the significance of the Toronto exchange continued to grow and the Calgary and Vancouver exchanges expanded their business.

The TSE 300, the broadest index available, closed for 1979 at 1,813, up 38.4 per cent on the year. Oil and gas stocks doubled on average and golds almost doubled. Trading on all exchanges totalled about $23bn, about double the volume of 1978. Shares traded were 2.5bn, up nearly 50 per cent, and average price per share was $8.97.

A better tax regime, besides better commodity prices, has brought about a resurgence of the mining and metals industry across Canada, and also a stronger role for the stock market in raising funds for exploration and development. Only six or seven years ago, after the 1973-74 commodity boom, the industry all but halted all expansion.

The oil and gas section of the market certainly dominated in 1979 and the first five months of 1980. It is likely to do so for the rest of the year and possibly through this decade.

Robert Gibbens

PROFILE
André Bisson Quebec banker


André Bisson: mandate

FRAMED ON the wall of André Bisson's office is the symbol of the high spot to date in his nine years as the Bank of Nova Scotia's top man in Quebec. It is the cover of the agreement between 16 Canadian and foreign banks for a $300m Eurodollar line of credit to the Government of Quebec, signed in January, 1979.

It was the first time Scotiabank, Canada's fourth-largest chartered bank, had served as lead banker for a consortium loan. But for M. Bisson the real pleasure was that for the first time in Quebec's financing history, such a document was drafted in French. Even the big German and French banks have accepted the tradition of English as the language of the Eurodollar.

Since Quebec's recently-passed language law made French the province's official language, bank officials wanted to protect themselves against any future legal challenges. M. Bisson also thought it was about time such things were written in the language of 80 per cent of the province's population. So the line of credit was written in both English and French, with the proviso that if there is a conflict in interpretation the French text will prevail.

The fact that this occurred under the leadership of the Bank of Nova Scotia and not of a Quebec-based "Francophone" bank underlines the determination of both M. Bisson and his superiors in Toronto to make Scotiabank a force in the French community.

Milieu

When M. Bisson, 50, joined the bank in 1971, he was the first French-Canadian to head the Quebec operation. Until then, senior Quebec management had been English-speaking and the bank's language of work was English. No longer. Today, throughout its 95-branch network in Quebec, 92 per cent of employees—from managers to clerks—are either French-speaking or bilingual.

Making Scotiabank truly a part of its milieu was the first part of the mandate M. Bisson was given when he was hired as Quebec general manager.

As a second step, the bank is increasing its recruiting efforts among the French community.

Of the defeat of the referendum on sovereignty—association on May 20, he says: "That vote was good for Quebec and for the economy. What's most important is the feeling it will give outsiders of confidence in Quebec."

Wendie Kerr

Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

● MATERIALS

Protects metal from corrosion

VACSOL IS an extremely simple system for the on-site acid-proofing of metalwork against concentrated liquids or the corrosive gases produced in chemical plants, plating shops or anywhere else where acid is employed.

Brushed or sprayed, a Vacsol plastic coating will produce a tough well-bonded vinyl skin of high chemical and abrasion resistance, which can be touched up at any time, should damage occur. Makers say it is the answer to most of the problems faced by maintenance engineers of corroding pipes, bus-bars and electrical fittings that would be too costly to dismantle and send away for plastic coating.

At ambient temperatures, Vacsol is resistant to most mineral and organic acids, oil, detergents and brine, and has an electrical resistance of over 1,000 volts DC per 0.005 in (125 microns) coat. It is a modified PVC one-pot coating which needs no primer on ferrous metals or asbestos.

It is supplied in 5 litre cans either singly or in export cartons of six cans.

Ducker and Ducker, 10 Orchard Street, Bristol BS1 5EH.

Flame retarding fibre

SINCE LEGISLATION and public concern has highlighted safer, flame retardant fabrics, their use is now vital in furnishing fabrics, nightwear, pile fabrics and wallcoverings. The Japanese derived fibre, Cordelan, is inherently flame retardant, does not emit any significant toxic fumes and will not melt or drip.

It is said to emit less smoke than other fire-retardant fibres, is not carcinogenic, and because the flame retardancy is built into the fibre, it cannot be diminished by laundering, dry cleaning, or bleaching.

Under an agreement recently reached with the Mitsubishi Corporation, distribution of Cordelan will be undertaken in the UK by Sillaford, 67, Bradford Road, Brighouse, West Yorkshire (0484 710231).

The fibre is available in deniers ranging from 1.5 to 15, in a variety of staple lengths, dull or bright.

● COMPONENTS

Makes engines work well

TODAY'S emphasis on petrol economy has lead to many modifications to engine design to promote efficient burning of fuel.

Pressure transducers to test the pressure waveforms inside the cylinder were a major advance in the field of analysis equipment, but due to the high pressures and extreme temperatures which they had to withstand, were very expensive to manufacture.

Now available from Computer Engineering, is a range of PZT transducers which due to their external mounting overcomes many of the problems previously experienced. The washer-shaped devices are placed between the spark plug and cylinder head and will give an electrical output proportional to the cylinder pressure.

The transducers generate a very strong signal which is clearly distinguishable above the background vibration within the engine. They feature a frequency band width of 15 kHz and due to their ceramic composition of lead, zirconia and titanium can survive in temperatures up to 365°C—well above the 250°C normal operating temperature. Copper electrodes are employed, insulated by fibreglass reinforced polyimide plastic, able to withstand high temperatures and corrosive environment.

Stress variations from the fluctuating cylinder pressures produce a voltage from the transducers which is fed to the engine analysis equipment, for example, the YK-01 knockmeter and YA-01 Indiscope also introduced by CEL.

Computer Engineering, 14, Wallace Way, Hitchin, Herts, SG4 OSE.

It is claimed that this new skiving and burnishing machine reduces the cost of deep hole finishing by up to 50 per cent when compared with traditional honing methods. The maker, Westbrick Engineering, Harrington Lane, Pinhoe, Exeter, Devon (0392 69241), also says other advantages are increased surface hardness, better corrosion resistance and reduced ovality. Skiving is defined as any cutting action using a trailing edge cutter. It can be likened to peeling and produces a specific pattern to the metal surface which will be responsive to the subsequent roller burnishing operation which causes the material to "flow" and produce a very fine, work-hardened finish. This machine will deal with cold drawn seamless tube up to 6 metres long with bores up to 200mm diameter. Total capacity claimed is about 2,500 metres per week depending on size.

● METALWORKING

Bandsaws cope with a variety of jobs

EIGHT DIFFERENT models of Agazzani bandsaw machines are included in two new ranges introduced to the UK by machinery division of Macpherson Components, Jenkins Lane, Barking, Essex (01-594 5500).

Both ranges are designed for high output performance, maximum operating safety and the minimum of maintenance requirements, says the company.

Cosma CA range has blade lengths from 2.25 to 7.1 metres with maximum cutting heights from 17 to 71 cm. Saw pulley diameters are from 30 to 100 cm, and operating speeds from 600 to 1,400 rpm. Saw table dimensions range from 41 x 46 cm to 103 x 146 cm with a saw table tilting facility provided on all but the largest of the eight models.

Other range, the N-RA, has applications in a variety of different industries, including woodworking, shopfitting and allied trades. Standard features include an adjustable side fence for mounting on the left or right hand side of the work table and, on all models except the largest, a tilting table. Blade lengths are from 2.25 to 7.2 metres, with maximum cutting heights from 17 to 65 cm. Saw pulley diameters are from 30 to 105 cm and operating speeds from 580 to 1,400 rpm. Saw table sizes are from 41 x 46 cm to 110 x 140 cm.

● PROCESSING

Fast bottle washing and sterilising plant

BECAUSE THE plant does not utilise a pasteuriser unit, it is essential to ensure an unusually high level of cleanliness and bottle-sterility at the Fredericia Brewery, Denmark, says Barry-Wehmiller, whose Altrincham factory is custom building a Series 40 bottle washer which will be delivered to the Danish brewery later this summer.

The machine provides a total submerged caustic soak time of 12 minutes; the bottles taking a total of 20 minutes to pass through the machine.

It has six soaking compartments, is equipped with integral label flushing systems, makes optimum use of reclaimed water and handles up to 60,000 bottles an hour.

Dirty bottles are loaded into the 40 carriers across the width of the machine by a rotating action and then fed through the unit. The bottles are flushed with water at 40 degrees C to remove loose contamination, then passed through the soaking compartments with caustic solutions at progressively increased, then decreased, temperatures.

After the caustic soak, the bottles are rinsed internally and externally with reclaimed water, and finally softened fresh water. They are then lowered from the carriers by rotating cams and pushed out on to the discharge conveyor.

Built into the third and fourth caustic soaking compartments are label flushing systems and a deluge of caustic solution flushes off any stubborn or trapped labels which are carried to the base of the compartments. All soaking compartments are fitted with label separators which discharge labels from the base of the compartments on to a waste conveyor.

The Series 40 is heated by high pressure hot water and the strength of the caustic solution is maintained at a constant level by a Crossfield Detomat detergent dosing unit.

● TRANSPORT

Eases steel handling problems

MOVEMENT of heavy and unwieldly goods between the delivery, production, and despatch areas of the extensive works at Kiverton Park Steel and Wire Works, Sheffield, has long been a headache until the operation of six new 25-ton drawbar platform trailers from Alexander Trailers, Cambridge Industrial Area, Salford (061 832 2121).

Latter company was commissioned to design and produce trailers which would move with ease from exterior to interior locations, with good manoeuvrability in confined spaces.

Delivery of the trailers has proved an immediate elimination of wasteful deployment of capital equipment and manpower as, hitherto, a number of Kiverton's heavy goods vehicles had to be on almost permanent stand-by for on-site transportation duties. There is the extra benefit of a big saving on road fund tax, as these trailers are exempt from this.

The trailers have S cam air brakes on all four wheels operated through the towing vehicle and there is a mechanical handbrake operating on the back axle for parking and emergency use.

The chassis are of all-welded, rolled steel I beam and channel construction, and the deck and headboard are of machined hardwood, with a 6 in perimeter steel upstand round the deck area for load location.

An extensive system of lights and reflectors ensures that the trailers can be used on night shifts, and the lights are recessed wherever possible for safety in operation. All wiring is protected by steel conduit.

Exceptional manoeuvrability is said to be provided by the turntable, and tyres are G.74 Bearcat Grizzley simulated pneumatics twinned on both axles to spread the load and completely eliminate blow-out danger.

Drawbar assembly is hinged with an adjustable spring apex leveller and there is a 3 in internal diameter eye hitch enabling hitching and unhitching without the driver leaving his cab.

Trailers are operated by a Montgomery Reid MR6000 towing tug following close co-operation between this company and Alexander to achieve complete compatability.

● INSTRUMENTS

Finds leaks in vacuum systems

BOTH VERY small and relatively large leaks in vacuum systems operating down to one-tenth of a microtorr can be detected by the Delta Ultra Sense portable leak detector available in the UK from Megatech, 2a, Waterloo Road, Havant, Hants, PO9 1BH (0705 472868).

A one-inch diameter five-inch long sensor is permanently plumbed into the vacuum system and will detect the presence of externally applied tracer gases such as helium, freon, hydrogen and also liquids such as acetone and alcohol as they find their way into the system via the leak. The associated electronics/meter unit measures only 3 x 7 x 8 inches but, claims the company, its sensitivity is only one order of magnitude less than that of a mass spectrometer.

Measures dust hazard

SPECIALLY DEVELOPED to measure the level of asbestos dust in the industrial environments is a rapid fibre counter. The M88, available at about £10,000, from Vickers Instruments, Haxby Road, York.

Equipment consists of a modified standard Vickers M17 microscope which allows collimated beams of light to be directed on to prepared membrane filter specimens and a single operator is said to be able to accurately count up to 100 membrane filter asbestos samples per day without eye strain, and with minimum fatigue.

Microprocessor based electronics measure and process scattered light information as the microscope stage is automatically rotated. Asbestos fibres are automatically counted and results are expressed on a four-digit read out in fibres per square millimetre of filter surface or fibres per ml of sampled air.

EDUCATIONAL

PERSONAL

PAIR OF ROYAL ALBERT HALL seats (PP) for sale. £12,000. Write Box Financial Times, 10, Cannon Street, EC4P 4BY.

IN RECENT YEARS, misuse of poisons is known to have caused the death of nine golden eagles, six red kites and nearly 100 buzzards. And in 1978 and 1979, over 24,000 oiled seabirds were found dead on our shores. Help the RSPB in its vital fight against these serious threats. Without your help we can't succeed. Please send your donation to Department FT 23, The Royal Society for the Protection of Birds, The Lodge, Sandy, Bedfordshire, SG19 2DL. Registered Charity, No. 207076. Thank you.

PUBLIC NOTICES

HALTON BOROUGH COUNCIL—£575,000 Halton Borough Council Bills issued on 28th May 1980, due 27th August 1980 @ 16.125%. Applications totalled £2.3m. £575,000 Bills are outstanding.

LEGAL NOTICES

JERSEY EXTERNAL TRUST LIMITED
(IN VOLUNTARY LIQUIDATION)

NOTICE IS HEREBY GIVEN that the Creditors of the above-named company are required to immediately send their names and addresses and the particulars of their claims and the names and addresses of their solicitors (if any) to R. E. R. Rumboll, of Coopers & Lybrand, La Motte Chambers, St. Helier, Jersey, Channel Islands, the Liquidator of the said company, and if so required by notice in writing from the said Liquidator are by their solicitors or personally to come in and prove their said debts or claims at such time and place as shall be specified in such notice or in default thereof they will be excluded from any benefits of any distribution made before such debts are proved.

Dated 19th May, 1980.

R. E. R. RUMBOLL, Liquidator.

CLUBS

COMPANY NOTICES

RENAULT VEHICULES INDUSTRIELS

Société Anonyme—Capital FF 860.625.000
Head Office: 129, rue Servient "La Part Dieu"
69003 LYONS, FRANCE
R. C. LYONS B 954.506.077

International 10¼% Loan 1975-80 for FF 100,000,000
"AUTOMOBILES M. BERLIET"
Alphanumerical code: 332.560

Notice is hereby given to bondholders that total and final redemption will happen on July 10th, 1980, price being FF 100,000 per bond.

THE NARBOROUGH (F.M.S.) RUBBER ESTATE, LIMITED

CHANGE OF ADDRESS

With effect from 1st June, 1980, the Company's Head Office in Malaysia will be located at Khong Kok Yat Building, 23, Jalan Bandar Raya (Hale Street), Ipoh, Malaysia.

RIVERVIEW RUBBER ESTATES BERHAD

CHANGE OF REGISTERED OFFICE

With effect from 1st June, 1980, the Company's registered office will be located at Khong Kok Yat Building, 23 Jalan Bandar Raya (Hale Street), Ipoh, Malaysia.

ASSOCIATED MUNICIPALITIES OF DENMARK

US$15,000,000 5¾% 20 YEAR EXTERNAL LOAN OF 1964

Bondholders of the above Loan are advised that the redemption due 30th June, 1980, i.e. US$1,149,000 nominal has been effected by purchase. The outstanding balance of the loan after this redemption is US$5,294,000 nominal.

HAMBROS BANK LIMITED
2nd June, 1980

THE THARSIS SULPHUR AND COPPER COMPANY, LIMITED

NOTICE IS HEREBY GIVEN that the Annual General Meeting of The Tharsis Sulphur and Copper Company, Limited will be held in the Hotel Lancaster, 7 rue de Berri, 75 Paris (8), on Monday, 30th June, 1980 at 12 noon for the following purposes:—

1. To consider and adopt the Report of the Directors and the Accounts for the year ended 31st December, 1979 with the Report of the Auditors thereon. (Resolution No. 1)
2. To re-elect Directors. (Resolution Nos. 2-5)
3. To reappoint the Auditors and to authorise the Directors to determine the remuneration of the Auditors. (Resolution No. 6)

By Order of the Board,
R. N. PETERS,
Secretary.

Registered Office:
136 West George Street,
Glasgow G2 2HF.
30th May, 1980.

NOTES

1. Any Member of the Company entitled to attend and vote at the Annual General Meeting convened by the foregoing notice is entitled to appoint one or more proxies to attend and, on a poll, vote on his behalf. A proxy need not be a Member of the Company. To be effective, forms of proxy must be deposited at the Registered Office of the Company not less than 48 hours before the time appointed for the meeting.
2. Holders of Share Warrants to Bearer who wish to be present at the meeting or vote by proxy may obtain instructions from the Registered Office of the Company or from the following appointed depositaries:—
Lazard Frères et Cie., 121 boulevard Haussmann, 75382 Paris.
Banque Vernes et Commerciale de Paris S.A., 2 ave. de Tervuren, 1040
Crédit Suisse, Lausanne, Switzerland.
Lloyds Bank International (Belgium) S.A., 2 ave. de Tervuren, 1040 Brussels.
Banque Générale du Luxembourg S.A., 14 rue Aldringen, Luxembourg.
3. There are no contracts of service between the Directors and the Company at the date of this notice.

TRAFALGAR FUND S.A.

société anonyme
Registered Office:
LUXEMBOURG, 14, rue Aldringen
Registre de Commerce:
Section B No. 8.202

NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS

The Annual General Meeting of Shareholders of TRAFALGAR FUND S.A. will be held at its registered office, 14, rue Aldringen, Luxembourg, on June 10th, 1980 at 15.00 hrs. for the purpose of considering and voting upon the following matters:

1. To hear and accept the reports of:
a. the directors;
b. the statutory auditor.
2. To approve the balance sheet and the profit and loss account as at February 29th, 1980.
3. Allocation of net profit.
4. To discharge the directors and the auditor with respect to their performance of duties during the year ended February 29th, 1980.
5. To elect the directors to serve until the next annual general meeting of shareholders.
6. To elect the auditor to serve until the next annual general meeting of shareholders.
7. Any other business.

In order to take part at the statutory meeting of June 10th, 1980 the owners of bearer shares will have to deposit their shares five clear days before the meeting at the registered office of the Fund, 14, rue Aldringen, Luxembourg, or with one of the following banks:
—Banque Générale du Luxembourg, S.A.
14, rue Aldringen, Luxembourg.
—J. Henry Schroder Wagg & Co. Limited,
120, Cheapside, London EC2V 6DS.

The Board of Directors.

THE THARSIS SULPHUR AND COPPER COMPANY, LIMITED

NOTICE IS HEREBY GIVEN that an Extraordinary General Meeting of the above-named Company will be held at Hotel Lancaster, 7 Rue de Berri, 75 Paris (8) on Monday the 30th day of June, 1980, at 12.20 o'clock in the afternoon (or so soon thereafter as the meeting of the Shareholders convened for that date by the direction of the Court shall have been concluded or adjourned) when the following resolutions will be proposed as Special Resolutions, viz:—

Resolution No. 1—That the Scheme of Arrangement dated the 30th day of May, 1980 between the Company and the holders of its shares of £2 each a print of which has been produced to the meeting and subscribed for purposes of identification by the Chairman thereof be and the same is hereby approved and that for the purpose of enabling effect to be given thereto the capital of the Company be reduced by cancelling 175p of the capital paid up on each of the shares of £2 of the Company and reducing the nominal amount of each such share accordingly.

Resolution No. 2—That subject to and contingently upon the said Scheme of Arrangement becoming operative the name of the Company be changed to "The Tharsis Company Limited."

Resolution No. 3—That subject to and contingently upon the said Scheme of Arrangement becoming operative the provisions of the Memorandum of Association of the Company with respect to the objects of the Company be and are hereby altered by deleting the objects set forth in Clause III of such Memorandum and by substituting thereby the objects set forth in Appendix IV to the document of which this Notice forms part.

By Order of the Board.
R. N. PETERS.
Secretary.

Registered Office:
136, West George Street,
Glasgow, G2 2HF.
Dated the 30th May, 1980.

Notes:—

1. A member of the Company who is entitled to attend and vote at the Extraordinary General Meeting convened by the above notice may appoint one or more proxies to attend and on a poll to vote instead of him. A proxy need not be a member of the Company.
2. To be valid a form of proxy must reach the Registered Office of the Company not less than 48 hours before the time fixed for holding the Extraordinary General Meeting.
3. (a) In order to attend and vote at the Extraordinary General Meeting, convened by the above Notice, a holder of a share warrant to bearer must deposit, not less than ten days before the day appointed for the Meeting, at the Registered Office of the Company, 136 West George Street, Glasgow, G2 2HF, a declaration certifying that he is the absolute owner in his own right of the share warrant deposited as follows:—
(i) where the warrant is within the United Kingdom, with an Authorised Depositary listed in Appendices I and II of the issue of the Bank of England Notice EC1 in force on 24th October, 1979 when the United Kingdom abolished Exchange Control restrictions. (These include Banks and Stockbrokers in, and Solicitors practicising in, the United Kingdom, the Channel Islands or the Isle of Man), or
(ii) where the warrant is outwith the United Kingdom, with one of the following Depositaries:—
Lazard Frères et Cie., 121 Bd. Haussmann, 75382 Paris, Cedex 08.
Banque Vernes et Commerciale de Paris S.A., 52 avenue Hoche, 75008, Paris.
Crédit Suisse, Lausanne, Switzerland.
Lloyds Bank (Belgium) S.A., 2 avenue de Tervueren, 1040 Brussels.
Banque Générale du Luxembourg 14 rue Aldringen, Luxembourg.
and that he does not hold the same in trust or as agent for any other person directly or indirectly and giving his name and address, the number of the warrant and number of the shares included therein signed by him, together with a certificate signed by such Depositary that the share warrant is and will be retained in such custody until after the Meeting or any adjournment thereof shall have been held.
(b) There shall be delivered to the holder of a share warrant to bearer who has complied with the foregoing requirements a certificate stating his name and address and the number of shares represented by the share warrant so deposited by him and such certificate shall entitle him to attend and vote at the Meeting in the same way as if he were a registered member of the Company in respect of the shares specified in the said certificate.
(c) Forms of proxy for use by holders of share warrants to bearer and copies of the Scheme of Arrangement and the Statement required to be furnished pursuant to Section 207 of the Companies Act 1948 may be obtained from the Registered Office of the Company and any of the abovementioned offices of Lazard Frères et Cie., Banque Vernes et Commerciale de Paris, S.A., Crédit Suisse, Lloyds Bank (Belgium) S.A. and Banque Générale du Luxembourg during usual business hours on any day (other than a Saturday, Sunday or public holiday) prior to the day appointed for the Meeting. Any form of proxy lodged by a holder of a share warrant to bearer who does not hold a certificate as to his entitlement to attend and vote at the Meeting shall not be valid.

BOND DRAWINGS

AUSTRIAN ELECTRICITY
U.S.$15,000,000 6.5/8% Guaranteed Bonds 1986

S.G. WARBURG & CO. LTD., announce that the redemption instalment of U.S.$900,000 due 1st July, 1980 has been met by purchases in the market to the nominal value of U.S.$543,000 and by a drawing of Bonds to the nominal value of U.S.$357,000.

The distinctive numbers of the Bonds, drawn in the presence of a Notary Public, are as follows:—

Serial Nos:—

343 to 612 702 to 762 764 to 789

On 1st July, 1980 there will become due and payable upon each Bond drawn for redemption, the principal amount thereof together with accrued interest to said date at the office of:—

S.G. WARBURG & CO. LTD.,
30, Gresham Street, London, EC2P 2EB,

or one of the other paying agents named on the Bonds.

Interest will cease to accrue on the Bonds called for redemption on and after 1st July, 1980 and Bonds so presented for payment must have attached all coupons maturing after that date.

U.S.$5,400,000 nominal amount of Bonds will remain outstanding after 1st July, 1980.

The following Bonds drawn for the redemption due 1st July, 1978 have not as yet been presented for payment:—

Nos:— 7652 to 7655 : 7658 : 7659 : 7706 : 7730 : 8097 : 8098 : 8406 to 8408

30, Gresham Street, London, EC2P 2EB 2nd June, 1980

CASSA PER IL MEZZOGIORNO
6¾% Guaranteed Bonds 1984

S.G. WARBURG & CO. LTD., announce that the redemption instalment of U.S.$1,875,000 due 1st July, 1980 has been met by purchases in the market to the nominal value of U.S.$1,787,000 and by a drawing of Bonds to the nominal value of U.S.$88,000.

The distinctive numbers of the Bonds, drawn in the presence of a Notary Public, are as follows:—

Serial Nos:— 10907 to 10994

On 1st July, 1980 there will become due and payable upon each Bond drawn for redemption, the principal amount thereof, together with accrued interest to the said date at the office of:—

S.G. WARBURG & CO. LTD.,
30, Gresham Street, London, EC2P 2EB,

or with one of the other paying agents named on the Bonds.

Interest will cease to accrue on the Bonds called for redemption on and after 1st July, 1980 and Bonds so presented for payment must have attached all coupons maturing subsequent to that date.

U.S.$8,125,000 nominal Bonds will remain outstanding after 1st July, 1980.

30, Gresham Street, London, EC2P 2EB 2nd June, 1980

Building and Civil Engineering

Hospital redevelopment by Lovell

ORIGINALLY BUILT as a temporary medical centre for wounded Canadian servicemen during World War 1, Orpington Hospital, Kent, is to be redeveloped under a £6.3m contract awarded by South East Thames Regional Health Authority to Lovell Construction Group.

Work should start this month although the hospital and accident centre will still continue to function during the 3½ year building operations.

Programme consists of demolishing most of the original single-storey hospital built between 1914 and 1918, and the construction of a three-storey 284-bed block, together with a staff restaurant and adjoining kitchen geared to produce up to 950 main meals a day.

The company will also build five two-storey residence buildings in two inter-connected blocks, plus renovation of two of the existing hospital buildings to form a nurse training unit and dental facility.

Buildings are to have trench filled mass concrete foundations, reinforced concrete slab floors, suspended and tiled at upper levels, brick and blockwork loadbearing external walls and pitched tiled roofs. The company is also responsible for internal partitioning, fittings, finishings, mechanical, electrical and lift installations, plumbing and drainage roadworks and landscaping throughout the project.

Also announced is a contract worth over £1.4m for building sponsored homes for up to 300 people at Amesbury Wilts., by Lovell Company, F. Rendell and Sons. This is being undertaken in partnership with Salisbury District Council.

Bovis enters new fields

CONTINUING ITS policy of diversification into new business areas, Bovis Civil Engineering has announced a joint venture with A. and J. Bull to handle the disposal of up to 1m tonnes of digested sewage sludge for the Thames Water Authority's Thamesgro operation.

This £5.2m contract involves the collection of liquid sludge from six sewage works, its transport to farms designated by the TWA and spraying on fields as agricultural soil conditioner.

Bovis and Bull will together provide the manpower to supervise loading and spraying which will eventually require a road transport fleet of 20 specially-built tankers, each with a capacity of 4,300 gallons. Five self-propelled spreaders will be used to carry out spraying operations.

Over 70 per cent of this sludge tonnage will be collected from one location near Heathrow Airport and other collection points are at Chertsey, Croydon, Enfield, Kingston and Woking.

Boot hospital project

CONSTRUCTION OF the first phase of Kilton District General Hospital, Worksop, Notts, will be undertaken by Henry Boot under a contract worth £4.75m. Total cost of this phase, including equipment, will be £6m.

Work has just started on eight separate sites within the boundaries of the hospital and comprises the main general hospital of part two- and three-storey construction, including two major operating theatres, two surgical wards, an x-ray department, in and out patient services, staff facilities and main entrance.

There will also be an adult mental illness unit providing 50 beds and 80 day places.

Alterations and extensions to the existing kitchens, boiler house and mortuary will also be undertaken, together with the provision of roads, vehicle parks, paths and landscaping, drainage and external services, including the provision of an electricity sub-station.

Project is scheduled for completion in November 1982 and this first phase should be in use during the summer of 1983.

Myton's stores-fitting

BRITISH HOME Stores has awarded two contracts, combined value £3.6m, to Myton (Taylor Woodrow Group) for fitting out new stores in Maidstone, Kent, and Eastbourne, Sussex.

Work entails the completion of the structural shells of both premises (recently completed developments), to provide sales areas, public restaurants, stock rooms, staff facilities, plant rooms and shop frontages, both planned to open during 1980-81.

Maidstone contract is worth about £2m, and work is already under way on the building of five levels at the Stoneborough Centre.

At Eastbourne (worth about £1.6m) work covers fitting out a building at three levels in the central redevelopment area.

In Scotland, Taylor Woodrow Construction has received a £1.2m contract from Organan Laboratories for the erection of a new storage and packaging facility at Newhouse, Strathclyde. Work involves the erection of a single-storey warehouse for palletised storage, and a low-level, single-storey annexe for canteen, offices, change room, packing, dispensing, quarantine, receipt and dispatch facilities.

Pitching for more business

AMERICAN companies seeking expansion in the UK and needing new factories, warehouses and offices will be the targets in a drive to attract more business by design and build specialist Hewgate of Aylesbury, Bucks.

Hewgate's confidence is bolstered by the fact that it is about to complete its eleventh design and build project in this country for U.S. companies and says its experience thus gained leads to the conclusion that further exploitation of its capabilities in this direction could be profitable. It also has behind it over 100 years of activity in the building business. So the Americans will not be dealing with a brash newcomer.

The British company's facilities for taking on new projects are being expanded and it is understood that several additional U.S. design/build contracts are in the pipeline.

The eleventh contract now nearing completion is a 30,500 square feet warehouse and office complex for Cooper Health Products on Hewgate's doorstep at Aylesbury. Other jobs have included a two-storey 22,000 square feet factory for Burroughs Machinery Corporation, also at Aylesbury, a 22,000 square feet surface coatings factory for Union Carbide at Swindon and a 50,000 square feet warehouse for G. D. Searle at Chadwell Heath, Essex.

Claiming that it offers speed, cost control and efficiency, Hewgate says that under a recent contract for a factory of well over 20,000 square feet it took only six weeks from the initial inquiry to the start of work on the site. During this time planning approval, Building Regulation approval, specification, working drawings, firm price and contract conditions were all agreed. The frame, manufactured by Butler International was erected within a further nine weeks.

Hewgate's chairman, Geoffrey Gates, reckons that this is the kind of service American businessmen appreciate—a service in which design, manufacture and construction are all co-ordinated.

Hewgate says that, as hitherto, it will build traditionally or with components fabricated by the UK subsidiary of the U.S.-based Butler Manufacturing Company with which it has had a long association. With a strong foothold in the U.S. market, an expanded professional design and construction team and a background of steady growth the company appears to be batting on a good wicket.

However, a good team always relishes a challenge and it may not be long before the company faces the bowling on some untried pitches. It could be very successful.

Eve busy for GLC

LARGEST OF contracts totalling over £4.7m just awarded to Eve Construction is a Greater London Council project involving the completion of works for the erection of 159 dwellings. The company has taken over from a previous contractor and work on this £2.5m contract has just started at Burrage Grove, Woolwich, London, SE18.

Construction of a regional assessment centre within the grounds of the Royal Philanthropic School, Redhill, involves the erection of a two-storey residential accommodation block for boys and is worth £1.15m.

At Billingshurst, West Sussex, work valued at £293,000 has been awarded by the Horsham District Council and covers the construction of the 1.5km eastern area outfall sewer and pumping station.

Also in the London area, three further projects include the £166,000 Grove Park sewer reconstruction scheme for the Borough of Southwark; layout and construction of a £392,000 riverside walk and a £210,000 courtyard improvement at East Dulwich Estate, both for the GLC.

Sprinkler contract

FIRE PROTECTION division of Hall and Kay Engineering has been appointed design/installation contractor for the fire fighting services for General Motors new central warehouse at Milton Keynes.

Included in the £1½m contract are 31 installation control valve sets and 7,000 sprinklers fed by a 300 mm diameter ring main, electric/diesel fire pumpset and two cylindrical water storage tanks.

Kyle Stewart wins £4.7m

CONSTRUCTION of a Tristar hanger at Gatwick Airport is to be started by Kyle Stewart in July. Valued at £2m, this contract is the largest of four awards to the company totalling £4.7m.

At Millington Road, Hayes, Middlesex, Kyle Stewart is to build an extension to the offices of Hitachi for The British Steel Corporation Pension Fund Nominees. This £700,000 scheme for a three-storey concrete-framed building has just started and is expected to be finished by this time next year.

In London, at 5-6 Cork Street W1, the company is about to start on a £1m refurbishment job. This involves alterations and additions to the existing five-storey office block and a new floor for the rear wing at fourth floor level. A plant room will be built at roof level and new services installed throughout.

Under a fourth contract, Kyle Stewart has already started on a three-storey office block in Marefair, Northampton, for Centros Properties. This £1m project is due for completion in just over two years.

Factory and warehouse

WORK HAS started on a new £3.5m factory warehouse and office complex for GTE Sylvania at Shipley, near Bradford, which will be undertaken by Marshall Project Management Services.

This is the largest contract won by the company (division of the Marshall Group) and involves the main factory and warehouse consisting of a propped steel portal frame 66.6 metre span with coloured pressed metal sheeting to the roof slopes and the walls, with a very high mechanical service content in the manufacturing area.

Internal mezzanine offices are supported on steel frames and finished with pre-cast concrete floor planks.

The building has been designed for future extension of Sylvania (which makes lamps and photoflash) and has a large warehouse at the rear for storage and despatch of goods.

Bos Kalis busy offshore

INCLUDED IN work worth over £2m just awarded to a Bos Kalis Westminster company, Land and Marine Engineering, is a £1.25m contract to refurbish a corroded ballast water pipeline from an offshore terminal on Grand Bahama Island.

This work is for Burmah Oil (Bahamas) and calls for the insertion of a 400 feet long 30 inch diameter glass reinforced plastic pipe into the existing 36 inch diameter submarine pipeline. Work has begun and the internal inspection and sea-bed anchoring of the existing line has already been completed.

Second contract won by Land and Marine involves the supply and installation of a conventional buoy mooring system with submarine pipeline for the electricity authority of Cyprus. The installation will be used for intake of fuel oil to a new power station being constructed at Dhekelia.

Pipe joints meet latest BS

ANNOUNCING that it is the first UK concrete pipe maker to offer a pipe joint designed specifically to meet the requirements of the new (not yet published) British Standard 5911 Part 1 (which will replace the current BS 556) Birchwood Concrete Products has just launched a new range of horizontally and centrifugally spun concrete pipes.

The company has just installed new manufacturing facilities at Cotes Park Industrial Estate, Somercotes, Derbyshire (0773 602432) and says that full scale tests prove that the positive and easily made rubber ring joint meets all the stringent joint type tests included in the new British Standard.

These new spun pipes are available in the nominal size range from 600 mm to 1800 mm, in 2.5 metre lengths, to all BS strength classes, and the pipes can, if required, be supplied bearing the BSI kitemark.

Colour brochure with full details of the range of precast concrete pipes and manholes is now available from the company.

IN BRIEF

- Brick contract worth £170,000 has been awarded to Ibstock Building Products to supply 500,000 Aztec facing bricks for the new £12m Ardilaun Centre being developed by MEPC Ireland at St. Stephens Green, Dublin.
- Gosport builder John Hunt has been awarded a £500,000 local authority contract to build phase II of the Holbrook Recreation Centre at Holbrook, Gosport.

Jobs for Miller Buckley

LARGEST PROJECT in contracts totalling £1.6m just awarded to Miller Buckley is the building of an above-ground installation for British Gas Corporation's East Midlands region at Aylestone Road, Leicester, worth £584,707.

Major contracts also come from Black & Decker (£428,000) for warehouse and office accommodation, and building refurbishment for member company Miller Buckley Developments (£340,000).

Other work includes a single-storey extension for International Paint Company, conversion of a building into computer room for RHM Foods at Willesden, London, and a storage building in Birtley, Co. Durham, for Durham Chemicals.

Cubitt's £2.5m housing

LOCAL AUTHORITIES in the Midlands have awarded contracts totalling more than £2.5m to Cubitts Housing which include modernisation of homes in Nottingham—£1.2m project covering 154 homes at Highbury Vale, and another 60 homes in the city (contract worth £535,000).

At Derby, housing of most unusual construction—the walls are made up from sheets of cast iron lined with asbestos to deaden noise and retain warmth—are being improved, with central heating being installed and kitchens updated. Over 80 homes are affected and the cost will be £420,000.

Coventry Churches Housing Association has retained the company to build 22 homes of traditional construction at Linwood Drove under a contract worth £347,000.

Hostel for the aged

JEWISH WELFARE Board has contracted Lesser Design and Build to create a £1.4m hostel for the elderly at Gants Hill, Ilford, expected to be completed by October 1981.

CONTRACTS AND TENDERS

YPF

REPUBLICA ARGENTINA

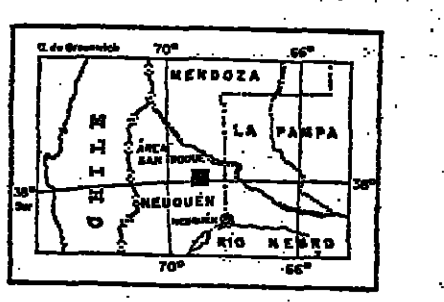
YACIMIENTOS PETROLIFEROS FISCALES

SOCIEDAD DEL ESTADO

Call for bids contracting hydrocarbons development and exploitation works, according to the following detail:

Tender No. 14-043/80

LOCATION MAP



SUPERFICIE 81.000 ha

AREA	OPENING DATE
"SAN ROQUE" (Neuquina Basin), Provincia del Neuquen	October 27th 1980 at 10.00 a.m.

- Tender condition set value: The equivalent of us$ 7.500 in Argentine pesos, payable according to the seller rate of exchange of the Banco de la Nación Argentina in force on the day before the purchase.
- Opening of the bids will take place at the "General Belgrano" Hall, No. 777 Roque Sáenz Peña Avenue, 13th floor at the above mentioned time.
- The parties interested in bidding in this tender can buy Special and General Conditions of Tender at the GERENCIA DE LICITACIONES Y NEGOCIACIONES, Suite 832, 8th floor, at 255 Esmeralda Street, Buenos Aires, Mondays through Fridays from 08:45 to 12:30 a.m. and from 14:15 to 15:15 p.m. as from May 6th, 1980.
- Information about this tender can also be obtained at our Technical and Commercial Office in the U.S.A. Argentine Government Oilfields placed in Houston, Texas, 5 Greenway Plaza, Suite 210.

INVITATION TO BID

1. The Maritime Bank (Denizcilik Bankasi T.A.O.) the Turkish State Railways (Türkiye Cumhuriyeti Devlet Demir Yollari) and the General Directorate of Harbour Construction (Limanlar Insaat Genel Mudurlugu) invite bids for the supply of the following equipment:
   FOR DB
   (a) Main and auxiliary engines, engine room auxiliaries and miscellaneous equipment for one 2,500 bhp tug.
   (b) Main and auxiliary engines, engine room auxiliaries and miscellaneous equipment for five 1,500 bhp tugs.
   FOR TCDD
   (a) 76 mobile cranes, diesel hydraulic type.
   (b) 11 tractors, tow type.
   (c) 18 trainers, tow type, flat bed.
   (d) 9 crawler cranes, diesel hydraulic.
   (e) 2,800 m. crane rails, type MRS 87.
   (f) Crane rail fastening devices.
   FOR LI
   Auxiliary engines and equipment for four 525 bhp tugs.
2. DB. TCDD and LI intends to apply the proceeds of a loan in various currencies equivalent to US$75 million granted by the World Bank for the rehabilitacion of 10 major ports in Turkey.
3. This bid invitation is only open to suppliers from member countries of the World Bank and Switzerland.
4. Tender documents pertaining to the above inquiry may be purchased against the remittance of US$50 for each package (9 packages in total) from the following addresses as from June 15, 1980, until June 30, 1980:
   FOR DB
   Denizcilik Bankasi T.A.O.
   Tersaneler Mudurlugu
   Karakoy—Istanbul
   Turkey.
   FOR TCDD
   Devlet Demir Yollari
   Malzeme Dairesi Baskanligi
   Gar/Ankara
   Turkey.
   FOR LI
   Bayindirlik Bakanligi
   Liman Insaatlari Genel Mudurlugu
   Kara Yollari Sitesi B Blok
   Ankara, Turkey.
5. Only bidders which have purchased the tender documents shall be allowed to participate.

CONTRACTS & TENDERS

rate £19.50p per single column centimetre

COMPANY NOTICES

TENDERS FOR GREATER LONDON BILLS

1. The Greater London Council hereby give notice that Tenders will be received at the Chief Cashier's Office, Bank of England, London EC2R 8AH, on Monday, 9th June, 1980, at 12 noon for Greater London Bills to be issued in conformity with the Greater London Council (General Powers) Act 1967, to the amount of £25,000,000.
2. The Bills will be in amounts of £5,000, £10,000, £25,000, £50,000, £100,000 or £250,000. They will be dated Thursday, 12th June, 1980, and will be due 91 days after date, without days of grace.
3. Each Tender must be for an amount not less than £25,000 and must specify the net amount per cent. (being a multiple of one new halfpenny) which will be given for the amount applied for.
4. Tenders must be made through a London Banker, Discount House or Broker.
5. The Bills will be issued and paid at the Bank of England.
6. Notification will be sent by post on the same day as Tenders are received, to the persons whose Tenders are accepted in whole or in part and payment in full of the amounts due in respect of such accepted Tenders must be made to the Bank of England, by means of cash or by draft or cheque drawn on the Bank of England, not later than 1.30 p.m. on Thursday, 12th June, 1980.
7. Tenders must be made on the printed forms which may be obtained either from the Bank of England, or from the Council's Offices at The County Hall.
8. The Greater London Council reserve the right of rejecting any Tenders.

M. F. STONEFROST, Comptroller of Financial Services.
The County Hall, London SE1 7PB.
2nd June, 1980.

THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ

Anatomy of a 'traumatic' takeover

Christopher Lorenz examines some of the hidden perils of diversification through acquisition

GLEN HANEY is an unusually mild-spoken American who seldom indulges in the national habit of hyperbole. So when he describes an experience as "traumatic" and a set of problems as "excruciating," you take him deadly seriously.

Haney is describing his company's version of what is so often a planner's nightmare: the conflict between strategic dream and operational reality that tends to beset diversification-by-acquisition.

A swelling body of research into diversification patterns on both sides of the Atlantic, is demonstrating that there is a very good chance that even the best-planned takeover will fail: not for the simple reason that the predator fails to catch its prey, but because all sorts of skeletons, strains and stresses emerge only after the catch has been made.

Haney is vice-president of world marketing for Sperry Univac, the $2.5bn computer division of Sperry Corporation, a widely diversified engineering group. In 1977, after several years of planning, Pennsylvania-based Univac acquired Varian Data Machines (VDM), one of the mass of high-technology companies which has sprung up on the sun-drenched coast of Southern California, Los Angeles' answer to San Francisco's famous Silicon Valley.

In spite of VDM's relatively tiny size—it had sales of $30m in 1977—Univac considered that, of the few available acquisition candidates, the company had the best-developed skills and expertise to become a solid foundation for its own large-scale diversification into minicomputers. This new and fast-growing market was already worth nearly $5bn a year.

Univac has a good deal of experience in digesting acquisitions. The purpose of some of them has been to secure immediate market share (the purchase of RCA's large computer business, for example). Other, mainly small companies, have been

PLANNING IN AN UNCERTAIN WORLD

bought for their future promise, or for their specialised technology and market know-how, or for both. Varian Data Machines fell squarely into the second category, though its existing "base" of customers provided a useful bonus.

Univac already knew that before VDM's potential as a major force could be realised a radical transformation had to be made: from a maker of custom-designed products for individual customers, it had to be turned into an efficient mass-market manufacturer of a standard family of machines, with a much larger and more elaborate field force of marketing and service staff. But it had seriously underestimated both the complexity of this task, and the time it would take to carry out.

For at least a year after the takeover, it looked from the outside as if the project might prove a failure. On the inside, months of strain, including several executive changes, were necessary within the California subsidiary before the chief cause of its problems could be identified. This *lay in the quality of its design engineering*, the phase that links product design and development with production.

Though drastic remedial action was immediately put in train, its performance fell far short of the initial marketing and financial plans. It was only in 1979 that outturn was brought back in line with plan, though it is now running at above the original projections. As Haney comments with characteristic restraint, "That's good stuff."

Now that Haney's "trauma" is over he is relaxed enough to claim that he actually enjoyed the whole experience. It might have been a different story if he and his colleagues had not been prepared, more than once in the year following the acquisition, to admit that their initial perception of their problems was either incomplete or wrong—and to take the necessary action.

It is this same realism and openness which makes their story so instructive for others on the acquisition trail, and especially for two very interested parties: those planners who believe you can go into a takeover with a foolproof strategy for every eventuality; and those big business executives who want to preserve the entrepreneurial flair of a newly-acquired small subsidiary, while at the same time integrating it into their corporate structure and strategy.

Sperry Univac's Glen Haney (top)—an enthusiastic supporter of the decision to break into mini-computers via an acquisition. Vaemond Crane (above left) and Bill Grover were seconded from Univac to help him solve the problems that arose.

How Sperry Univac cured a stubborn case of indigestion

IN STARK contrast with the operational side of the exercise, the "strategic" elements of Sperry Univac's plan for diversification into mini computers were relatively straightforward.

For at least four years before the acquisition search actually began in 1976 the question of "what shall we do about minis?" had frequently been discussed at different organisational levels, particularly as part of Univac's annual five-year planning process. The question had appeared under the headings of both "threats" and "opportunities."

As time went by, more and more of the constituent parts of Univac's marketing organisation began to argue that the company should move into minis.

On the "opportunities" side, the basic argument was simply that the company would otherwise throw a lucrative new market away to its competitors—large, established and diversified multinationals like IBM and Honeywell, as well as smaller specialist suppliers of minicomputers, many of which were themselves rapidly developing into multinationals.

But Haney says the "more startling" reasons for the move appeared under the negative heading of "threats" to Univac's existing business. Pre-eminent was that it began to lose some orders to the mini specialists. In the light of prevailing trends in the technology and marketing of computers, it was inevitable that the trend could only accelerate.

Key criterion

The end result of the process of debate was that, in early 1976, Univac's executive committee established a special "Task Force" to answer the questions: "Shall we move into the mini business with a 'family' of products, and, if so, how?" After several months' work, the seven-person team reported back "Yes," and "through acquisition."

Somewhat surprisingly in view of the all-round competitive threat to Univac, Haney claims that timing did not play a key part in its decision to diversify by acquisition, rather than by internal product development—the dilemma always faced by any diversification-bent management. Though Univac would undoubtedly have taken longer to break into minis via internal development than by takeover, Haney says that speed was not the issue: the key criterion was establishing a firm base for the future.

Of fundamental significance in the company's decision was its recognition of a factor which often escapes the notice of diversifying companies, to their cost: that their new markets are not an extension of their existing business, but something entirely different.

Haney says Univac realised that the move from its traditional "mainframe" business into minis required "a different mentality . . . in building, testing, selling and maintaining the equipment" — in everything, that is. This view coloured every step that was subsequently taken, from the choice of acquisition candidates to the appointment of carefully selected executives to manage the operation.

Acceptance of the Task Force's recommendations was followed by the appointment of a small acquisition team. Out of an extensive search process quickly came contacts with three companies, two of which then proceeded to formal negotiations: Varian Data Machines and Company X.

Company X, whom Univac is still reluctant to name, failed to fulfil one of the acquisition conditions, that it should have its own marketing network. On the other hand, it had the advantage of being several times larger than VDM, and its current product line was more advanced. So it theoretically offered a larger and more established base from which to launch an attack on the mini market.

But the computer business trades heavily on fast-moving technological innovation and Haney claims VDM had greater design expertise. Though this had not been fully exploited—thanks in part to a cut in VDM's research and development budget—it appeared to offer more promise for the future. "So Univac was doubtful whether it would be worth paying Company X's extra premium for the possibility—though not the certainty—of an earlier breakthrough into the market."

Added to which, the President of Company X was not altogether happy with the takeover plan, while Univac insisted that any acquisition must be friendly: "being a predator is not consonant with our image," says Haney.

So talks were broken off, and *in June 1977 VDM was acquired*.

The problems which confronted its new owners can be broken into three categories, though they were closely inter-related: first, those that had been identified before the acquisition was made.

The second group was those that emerged only after Univac had actually moved some of its managers into the Californian operation. This is no reflection on the ability of the acquisition team. Predators always suffer the occupational hazard of "never knowing exactly what you're getting until you've got it," to quote the head of a British-based conglomerate with a virtually unparalleled experience in takeovers.

Not spotted

Last, but of most crucial importance, were those problems that were not spotted until about a year after the takeover, following further changes in top personnel.

The most obvious difficulty listed by the acquisition team had been the previous cutback in research and development.

Equally evident was that the quality of existing products was suffering from inadequate testing during and after manufacture. Allied to this was the perception that the transformation from custom-tailoring of *low-volume products to mass manufacture* of standard designs would not be easy. This was something of an understatement.

The second category of problems, identified shortly after the acquisition, was more concise but equally serious: that the manufacturing facilities in VDM's factory were *inadequate to support even the* initial growth in business which had been planned. As the delivery cycle shot up to six months—double the industry standard—VDM's marketing and financial targets for 1978 were missed by a wide margin. As yet, the exact cause was unclear.

By this time there had already been changes in the top *management of VDM*, now re-christened with another acronym, MCO (for Mini-Computer Operations).

After the takeover, Univac had put in its own general manager to run MCO. In order to ensure that the group's top headquarters management had a direct view of the subsidiary's progress, control was exercised not through Univac's divisionalised structure but from the centre, first by Univac's President, then by Glen Haney, one of the group's most senior marketing and product planning executives. Though he had been closely involved in the acquisition project from the start, little did he know that MCO's affairs would take up almost all his time during the next "traumatic" year.

As the serious nature of MCO's production-related problems became increasingly evident in late 1977 and early 1978, it was decided to strengthen the management of MCO's design and manufacturing by drafting in a top technical executive. A "director of development and manufacturing" was duly appointed alongside the head of MCO, and direct reporting responsibilities were divided between them: engineering and production to the technical side of the organisation, marketing to Haney. But because of his corporate-wide product planning role, Mr. Haney's involvement was broader than this split implies.

The new technical man was the ebullient Vaemond H. Crane, another Univac veteran. Most of his experience had been in research and development rather than production.

His actions during *the first* 12 months after his appointment in March 1978 were anything but those of a beginner. For one thing, it was Crane who unearthed the third, and key, category of problems. His initial analysis suggested that the main production bottleneck was the inflow of parts from suppliers, so he brought in a *senior manufacturing man with* the relevant experience.

But after three or four months' more exposure to the problems, and a more searching investigation, Crane discovered that some of the earlier analysis had been incomplete, or even wrong: the root of the trouble lay in the quality of MCO's own engineering—the stage that lies between product development and actual manufacture.

Not only had the Californian company's designers been paying insufficient attention to the manufactureability of their products—whether in small or large batches—but designs were being released into production when they were not complete. Both these factors were still affecting product quality and disrupting manufacture, increasingly so as output was stepped up and new products introduced.

With the benefit of hindsight, it is arguable that the acquisition team should have suspected these detailed problems, since they are typical of small, technology - dominated companies.

As for the obvious argument that the trouble should have been taken care of immediately after the takeover, Univac would reply that the search for its root was prolonged by the number of outer layers that first had to be peeled away. The company's reluctance to inject more than a minimum of its own executives into the new entrepreneurial subsidiary may also have played a role.

If Crane was to resolve all the problems he had finally identified — and quickly — he needed a manufacturing chief with a rather more general background than his first appointee. He turned once more to Univac's extensive ranks of experienced engineers.

Again belying his professed lack of experience at running a manufacturing operation, Crane rapidly took the drastic step of having the factory gutted and completely rebuilt. In addition to the money Univac had already begun pouring into R and D, it now had to inject far more extra funds than planned in the form of new plant and equipment. Shortly after Crane's first anniversary in California, in March, 1979, Univac's cumulative expenditure on MCO's production facilities and new products had topped the $30m mark.

At the same time a thorough retraining programme for MCO's 1,300 employees had to be stepped up (its payroll had doubled in the year since acquisition, as part of the initial drive for growth).

But with many executives working a seven-day week, the transition was completed in a matter of months. By the end of the 1979 fiscal year, in March, production and sales were back up to the original target, and are now running well ahead.

Crane's transformation of MCO's engineering and *production represents only one* part of the revolution that Univac has carried out at MCO. The parent company's standard administrative procedures — financial controls, management information systems, planning and the rest—have all been gradually introduced. And on the marketing side, there has been a quantum jump from a relatively untargeted, small-scale operation to one of mass-marketing in carefully targeted market segments.

Much of the credit for the later changes must go to Bill Grover, who took over the non-technical side of MCO just over a year ago, which was also when direct control of this was transferred from Haney to the marketing side of Univac's divisional organisation.

The cessation of MCO's special status as a separate entity, the introduction of a panoply of big corporation procedures, and the number of Univac executives now in key positions at MCO, all raise the inevitable question: has Univac killed the thrusting, entrepreneurial flair that made the original Varian Data Machines an attractive acquisition?

Bill Grover replies that there has been a conscious policy of minimising the number of Univac "immigrants," and points out that there are still only half a dozen "Univac men" among MCO's top 40 managers.

Until three months ago this included Vaemond Crane, but, having accomplished MCO's production turnround, he has since left to run a competitor's manufacturing operations.

Both Grover and Haney would deny outside allegations that MCO's ability to exploit its resources to the full, by manoeuvring rapidly in the highly volatile minicomputer market, is being constrained by its subordination to the interests of Univac's traditional computer business. But Haney concedes that some loss of entrepreneurial spirit was inevitable if MCO was to become an integral part of Univac's overall corporate strategy. This, after all, was the whole purpose of the acquisition.

LOMBARD

U.S. Thatcherite experiment

BY SAMUEL BRITTAN

THE ECONOMIC policies of the Thatcher Government are being keenly watched by U.S. business spokesmen and leading Republicans.

But having come back from a Washington conference devoted to this very subject I am struck by the fact that the Carter-Volcker regime is already tackling inflation by a very similar monetary route to that of the British Government.

Indeed, the top economic items on the U.S. agenda for the Venice summit of June 22 is a joint declaration by heads of government giving priority to anti-inflationary, monetary and fiscal policies and resisting the seductive claim of anti-recession stimulant which can only aggravate unemployment in the not-so-very-long run.

The extent of Washington's anti-inflationary commitment was borne in on me during a conversation with a key policy-maker on the eve of publication of a new "shock horror" figure for the leading business indicator. After a review of the evidence for a short versus a prolonged recession, and an expression of hearty agnosticism towards all forecasts, my informant admitted that even if he knew that the recession would be long and severe it would make little difference to his attitude. This was not because of callousness but because the switch in emphasis from interest rates to money supply by the Fed last October have given policy a degree of automaticity.

Indicator

The large drop in U.S. interest rates has not been due to any conscious relaxation of policy but to the automatic effects of a sharp drop in credit demands with unchanged monetary guidelines. The chief indicator that the Fed watches is the reserve of member banks with itself—i.e. the so-called monetary base minus public holdings of cash. Like the money supply itself these reserves have been well below targets so far this year.

Most remarkable of all has been that in an election year there have so far been no Presidential attempts to lean on the Fed to stimulate the economy. Indeed the Administration and Congress are still committed to a balanced budget in fiscal 1981. The "balance" is a term of art and as it assumes that there will not be the major recession which most forecasters are expecting. But a temporary deficit, due purely to a recession-induced drop in revenue, is accepted on all sides as being compatible with an anti-inflationary policy—even by Governor Wallich the Fed's outspoken dissenting hawk. The U.S. line is indeed almost identical with the various Burns-Lawson interpretations of UK fiscal policy involving a trend reduction in government borrowing rather than kneejerk lurches.

Relief

Obviously a Democrat Administration will try to give selective and symbolic relief to groups particularly hit by the recession. Moreover, vague and meaningless price and wage understanding with unions and management are reported on page 99 of the most heavyweight American newspaper. But these ornamentations do not affect mainstream policy.

The difference that U.S. leaders seek between their policy and that of Mrs. Thatcher is mainly that their own has been less clearly articulated theoretically, and that they have adopted it in the spirit of "if you know a better hole go to it." On the other hand the Carter-Volcker regime is much less bothered by the many "enemies inside the gate" in officialdom and in the business community which are such a curse to policy making in Britain. Indeed the present anti-inflationary stand may be slightly more adrift under a Reagan presidency because of the influence of wishful thinking advisers who counsel reductions in taxes without reductions in spending, under the deceptive slogans of "supply side economics."

But what strikes me most is the way in which middle of the road Democrats and officials have been prepared to repudiate the economics of the 1960s for which their opposite numbers among British Social Democrats and in Whitehall are still fighting so cussedly.

Making the criminal forfeit his riches

THE WEEK IN THE COURTS
BY JUSTINIAN

ONE SIGNIFICANT way of gaining public acceptance of the idea that courts should pass appreciably shorter prison sentences than they currently do on non-violent offenders (as the Home Secretary has been publicly exhorting the courts to do) would be to ensure that offenders are compelled to disgorge the fruits of their criminal activity.

Hitherto, the law has generally opted out of the business of recovering the criminal's ill-gotten gains and has left only partial assistance of reparation to the victims of crime.

Imprisonment, variable according to the size of the thieves' haul, is the price paid by the thief for the prospect of regaining his liberty in the not too distant future and then enjoying the profits of crime (however seriously depleted by inflation). Thus, the great train robbers, received sentences of up to 30 years' imprisonment and no monetary penalties for stealing £2m.

Victims of crime have in theory been given limited help ever since 1870. Compensation and restitution of stolen property are available legal remedies, although they are not extensively used. And in 1972 Parliament introduced experimentally a system of criminal bankruptcy.

A criminal court, on convicting an offender for any offence of theft or fraud, who could be shown to have caused loss to others of £15,000 or more in aggregate, could set in train by a more direct route than is available to the ordinary creditor the civil process of bankruptcy. That system has not worked well, largely because the courts have tended to use the criminal bankruptcy order against the more serious offender in addition to a long term of imprisonment.

Offender

Such an offender is not encouraged to co-operate with the Government's insolvency service, and thus is able to frustrate any attempt to trace and recover the offender's property. There is little sign yet that the Parole Board is prepared to grant an early release on parole licence in return for collaborative effort from the prisoner (would Charles Richardson have got parole at the seventh time of asking if he had offered some reparation to the victims of his violent crimes of the 1960s?)

The Department of Trade's committee on insolvency, under the chairmanship of Sir Kenneth Cork, will be reporting soon. It is likely to indicate that criminal bankruptcy should be devised afresh as part of a new law relating generally to the forfeiture of an offender's property.

At present Parliament has concentrated on the forfeiture of noxious material — for example, firearms and other offensive weapons, pornography and dangerous drugs.

These are all instances where there is no direct victim, in the sense that no individual will have suffered loss of or damage to his property or person. But the pickings of pornographers and drug traffickers have indeed proved so rich that even victimless crime now attracts authority's desire to step in.

The lucrative gain made from illegal drug taking has already led some prosecutors to seek expectantly from the courts orders of forfeiture under the present law. One such instance, arising out of the drugs prosecution in 1978 known as Operation Julie, is under review by the House of Lords, whose judgment is expected this month. That decision is likely to provide the Parliamentary stimulus to an extension of existing courts' powers to order forfeiture not only in the drugs field but also in other illegal activities.

Section 27 of the Misuse of Drugs Act 1971 provides in simple general language that on a conviction for an offence under the Act "anything relating to the offence" may be forfeited.

The trial judge and the Court of Appeal in the Operation Julie case held that the words of the section were wide enough to catch any after-acquired property including (according to the Court of Appeal) even the houses bought by the offenders with the proceeds of their drug dealing. (The trial judge excluded any land or houses from his order of forfeiture which amounted to three-quarters of a million pounds of monies and other personal property.)

Confiscate

The offenders argued that this ruling misinterpreted Parliament's intention; the legislation had intended only to seize and confiscate the illegal drugs and anything that was directly associated with the transaction constituting the drug offence. Thus the syringes or scales used in the illegal supply of drugs would be forfeitable, as indeed would be any money actually handed over by the purchaser to the drug trafficker.

But the proceeds of drug dealing, stacked away in foreign bank accounts or converted into consumer durables or other properties, could not, it was argued, become forfeitable.

If the House of Lords accedes to this argument and quashes the order, the urge to legislate will be evident. But some of the public disquiet at the present severe limitations on the powers of forfeiture will be assuaged by the knowledge that the authorities in Switzerland have seized monies deposited in bank accounts in Zurich that were referable to the drug trafficking in the Operation Julie case.

Legislatures throughout the world have recently been moving towards an extension of powers of forfeiture. Aimed not primarily at the street pushers or drug couriers, since short prison sentences together with a suitable fine operate as the most effective penalty for such persons, in terms of their limited assets and income, the legislation rather aims at stripping the large-scale operators in illegal drug manufacturing and supply of their vast profits where fines and jail sentences of tolerably humane lengths are inadequate. Part of this legislative aim indeed is to strip the operator of his profits so that losses of liberty can be kept in reasonable proportion.

A main field of legislative activity has been against the smuggling of illegal drugs. Legislation in the United Kingdom gives wide powers to the Customs and Excise to forfeit anything brought in or exported which is subject to a prohibition on import or export, but it does not allow confiscation of the proceeds of the sale of a prohibited import or export.

In 1971, however, Parliament did introduce an interesting power. In the Immigration Act ships of less than 500 gross tonnes and aircraft or vehicles knowingly used in the carrying of illegal immigrants into this country could in certain circumstances be forfeited. There is no reason why ships and aircraft of any tonnage that are knowingly used in the import or export of prohibited drugs should not likewise be forfeited.

Problems

The problems of enforcing forfeiture orders prompt hesitation before rushing into legislation. The fruits of crime do not long remain in their original form or even stay in the hands of the offender.

What should happen to monies deposited by a criminal with a bank; is the bank to be deprived of any rights it may have over its client's funds? And what about the gift to an offender's children held in trust for their education? Or the car which has been purchased in part exchange for another car itself purchased with some of the profits of crime?

If some of the problems of execution of forfeiture orders seem daunting, there is little doubt that attempts to counter them by legislation will be made and soon.

Mediocre look for the Derby

RACING
BY DOMINIC WIGAN

WILLIE CARSON has said: "I've gone for Henbit, even though I don't think he's a champion." That seems to sum up this year's Epsom Derby picture.

Seldom has the Blue Riband looked more sub-standard. This has been reflected by the volatile market state which will see a drastic reshuffling of odds.

Although Henbit has neither raced nor disappointed in the past fortnight, few backers have shown interest in the colt that Carson has chosen in preference to the one-time favourite, Water Mill.

Instead, ante-post concentration has been on the Irish pair, Monteverdi and Nikoli, as well as on Harry Wragg's Newmarket-trained outsider, Pelerin.

The reasoning of those who have chosen to differ with the leading Irish pair at this stage is difficult to understand. Monteverdi produced his most disappointing display wearing blinkers for the first time in the Irish 2,000 Guineas, while the winner, Nikoli, was announced a definite Epsom absentee as he was led into the winner's enclosure at the Curragh.

Connections of Nikoli have said his action and temperament were not suited to Epsom.

There are likely to be about 20 runners in Wednesday's line-up—a larger field than could have been anticipated 10 days ago—and this does not augur well for the reportedly highly strung Nikoli. It is felt he may get worked up in the Derby atmosphere.

I wonder whether the decision for Nikoli to participate was influenced by the health of Paddy Prendergast senior. It is widely known that Paddy, now gravely ill, wants to be associated with an Epsom Derby winner more than anything else.

Turning to today's card, the most interesting seems at Bath. Stria, a promising fifth of 21 behind Little Atom at Thirsk recently, looks a likely winner in the Milbourne Maiden Stakes. Royal Blood can beat shorter priced rivals in the Pulteney Stakes.

BATH
2.00—Royal Blood***
2.30—Stria**
3.00—Pincents
3.30—Violino Fandango
4.00—Narix
4.30—Falkland Palace*

TV Radio

BBC 1

† Indicates programme in black and white

6.40-7.55 am Open University (Ultra high frequency only). 9.52 For Schools, Colleges. 11.25 You and Me. 11.40 For Schools, Colleges. 1.15 pm News. 1.30 Over the Moon. 2.01 For Schools, Colleges. 3.15 Songs of Praise from Portstewart, Northern Ireland. 3.53 Regional News for England (except London). 3.55 Play School. 4.20 Cheggers Plays Pop. Newsround. 5.05 Blue Peter. 5.35 4.40 Godzilla. 5.00 John Craven's The Wombles.
5.40 News.
5.55 Nationwide (London and South East only).
6.20 Nationwide.
6.55 Ask The Family.
7.20 The Dukes of Hazzard.
8.10 Panorama.
9.00 News.
9.25 Monday Film: "The Rollicking Adventures Of Eliza Fraser," starring Susannah York and Trevor Howard.
11.15 Bellamy's Europe.
11.45 Weather, Regional News.

All Regions as BBC-1 except as follows:—

Cymru / Wales — 1.30-1.45 pm Pili Pala. 5.55-6.20 Wales Today. 6.55-7.20 Heddiw. 11.45 News and Weather for Wales.

Scotland — 1.10-1.15 pm The Scottish News. 5.55-6.20 Reporting Scotland. 11.45 News and Weather for Scotland.

Northern Ireland — 3.53-3.55 pm Northern Ireland News. 5.55 Scene Around Six. 6.20-6.55 Land 'n' Larder. 11.45 News and Weather for Northern Ireland.

England — 5.55-6.20 pm Look East (Norwich); Look North (Leeds, Newcastle); Look North-west (Manchester); Midlands Today (Birmingham); Points West (Bristol); South Today (Southampton); Spotlight South West (Plymouth).

BBC 2

6.40-7.55 am Open University.
11.00 Play School (as BBC-1 3.55 pm).
4.00 pm Music Time for Teachers (as BBC-1 12.10 pm).
4.50 Open University.
6.55 Six English Towns.
7.25 Mid-Evening News, including subtitles.
7.35 Around with Alliss.
8.05 Bird Spot.
8.15 The Waltons.
9.00 The Innes Book of Records.
9.25 Brass Tacks.
10.15 Rock Athlete.
10.45 Newsnight.
11.30 Russian—Language and People.

LONDON

9.30 am Schools Programmes. 10.20 Untamed Frontier. 10.43 Schools (continued). 12.00 Chorlton and the Wheelies. 12.10 pm Rainbow. 12.30 Doctor! 1.00 News, plus FT Index. 1.20 Thames News. 1.30 About Britain. 2.00 Against the Wind. 2.30 Monday Matinee: "Great Catherine." 4.15 Clapperboard. 4.45 The Latchkey Children. 5.15 Money-Go-Round.
5.45 News.
6.00 Thames News.
6.35 Crossroads.
7.00 Linglalongamax.
7.30 Coronation Street.
8.00 Can We Get On Now Please?
8.30 World in Action.
9.00 Fox.
10.00 News.
10.30 Monday Film: "The Killing Stone."
12.15 am Close: Personal choice with Denise Coffey.

All IBA Regions as London except at the following times:

ANGLIA

1.20 pm Anglia News. 2.00 Money-Go-Round. 2.30 Monday Film Matinee: "Women of the Year." 5.15 University Challenge. 6.00 About Anglia. 6.30 Survival. 10.30 Anglia Late News. 10.35 Everything in the Garden's Lovely. 11.05 Monday Late Film: "Theatre of Death." 12.45 am Reflection.

ATV

1.20 pm ATV Newsdesk. 2.00 Money-Go-Round. 2.30 "Jolson Sings Again," starring Larry Parks. 5.15 Take My Wife. 6.00 ATV Today. 10.30 Left, Right and Centre (specially extended programme looks at Europe on the first anniversary of direct elections to the European Parliament). 11.10 ATV Newsdesk. 11.15 Luke's Kingdom. 12.15 am Something Different.

BORDER

1.20 pm Border News. 2.00 Money-Go-Round. 2.30 Monday Matinee. 5.15 University Challenge. 6.00 Lookaround Monday. 6.15 About The Garden. 6.30 Out of Town. 10.30 Conference Report. 11.30 Las Vegas. 12.00 Border News Summary.

CHANNEL

1.20 pm Channel Lunchtime News, What's On Where and Weather. 2.00 Money-go-Round. 2.30 The Monday Matinee: "The Intruder." 5.15 University Challenge. 6.00 Channel News. 6.10 Project UFO. 10.28 Channel Late News. 10.35 The Television Programme. 11.05 Luke's Kingdom. 12.00 Police Surgeon. 12.25 am News and Weather in French.

GRAMPIAN

9.25 am First Thing. 1.20 pm North News. 2.00 Money-Go-Round. †2.30 Monday Matinee: "The Angry Silence," starring Richard Attenborough and Pier Angeli. 5.15 University Challenge. 6.00 North Tonight and Area Weather Forecast. 6.30 Out of Town. 10.30 Conference Report—The Scottish National Party. 11.30 Reflections. 11.35 The New Avengers. 12.30 am North Headlines.

GRANADA

1.20 pm Granada Reports. 2.00 Money-Go-Round. †2.30 Monday Matinee: "The History of Mr. Polly." 5.15 Granada Reports. 6.00 Granada Reports. 6.30 This Is Your Right. 10.30 Reports Politics. 11.00 The Late Film: "Girl on a Motorcycle."

HTV

1.20 pm Report West Headlines. 2.00 Take My Wife. 12.30 The Monday Matinee: "Cardboard Cavalier." 5.15 Batman. 6.00 Report West. 10.35 Soap. 11.05 The Monday Film: "Operation Cobra."

HTV Cymru/Wales—As HTV West/HTV General Service except: 10.05 am-10.20 abc. 12.00-12.10 pm Treheian. 1.20 Penawdau Newyddion Y Dydd. 1.25-1.30 Report Wales Headlines. 2.00-2.30 Hamdden. 4.45-5.15 Sêr. 6.00 Y Dydd. 6.25-7.00 Report Wales. 8.30-9.00 Yr Wythnos.

SCOTTISH

1.20 pm News Headlines and Road and Weather Report. 2.00 Money-Go-Round. 2.30 Monday Matinee: "Drive Hard, Drive Fast." 5.15 Little Vic. 6.00 Scotland Today. 6.45 Crimedesk. 10.30 Conference Report—SNP. 11.30 Late Call. 11.35 Kaz.

SOUTHERN

1.20 pm Southern News. 2.00 Money-Go-Round. 2.30 "Coney Island," starring Betty Grable. 5.15 Take My Wife. 6.00 Day by Day, including Southsport. 10.35 First Edition. 11.20 Mrs. Columbo.

TYNE TEES

9.20 am The Good Word, followed by North East News. 1.20 pm North East News and Lookaround. 12.30 Monday Matinee: "Cardboard Cavalier," starring Sid Field and Margaret Lockwood. 5.15 Mork and Mindy. 6.00 North East News. 6.02 Play It Again. 6.25 Northern Life. 10.30 North East News. 10.32 Northern Report. 11.00 The Monday Thriller: "The Sex Killer," starring Robert Horton. 12.30 am Epilogue.

ULSTER

1.20 pm Lunchtime. 12.30 Monday Matinee: "Uncle Silas," starring Jean Simmons. 4.13 Ulster News Headlines. 6.00 Ulster Television News. 6.15 Portrait of the Artist. 6.30 Happy Days. 10.29 Ulster Weather. 10.30 Into the Eighties. 11.00 The Odd Couple. 11.30 Gardening Today. 12.00 Bedtime.

WESTWARD

1.20 pm Westward News Headlines. 2.00 Money-Go-Round. 2.30 The Monday Matinee: "The Intruders." 4.12 Gus Honeybun's Birthdays. 5.15 University Challenge. 6.00 Westward Diary. 10.32 Westward Late News. 10.36 The Kingdom. 12.00 Police Surgeon. 12.25 am Faith for Life. 12.30 West Country Weather and Shipping Forecast.

YORKSHIRE

1.20 pm Calendar News. 2.00 Money-Go-Round. †2.30 Monday Matinee: "Uncle Silas," starring Jean Simmons. 5.15 University Challenge. 6.00 Calendar (Emley Moor and Belmont editions). 6.35 Chips. 10.30 Calendar Carousel. 11.00 Kate Loves A Mystery. 12.00 George Hamilton IV.

Radio Wavelengths

1 1053kHz/285m 1089kHz/275m	3 1215kHz/247m & 90-92.5vhf stereo	BBC Radio London: 1458kHz, 206m & 94.9vhf
2 693kHz/433m 909kHz/330m & 88-91vhf stereo	4 200kHz/1500m & 92-95vhf	Capital Radio: 1548kHz 194m & 95.8vhf
		London Broadcasting: 1151kHz, 261m & 97.3vhf

RADIO 1

(S) Stereophonic broadcast
‡ Medium wave

5.00 am As Radio 2. 7.00 Dave Lee Travis. 9.00 Simon Bates. 11.31 Paul Burnett. 2.00 pm Andy Peebles. 4.31 Paul Gambaccini. 7.00 Stayin' Alive. 8.00 Mike Read. 9.50 Newsbeat. 10.02 John Peel (S). 12.00-5.00 am As Radio 2.

RADIO 2

5.00 am News Summary. 5.03 Ray Moore (S). 7.32 Terry Wogan (S). 10.03 Jimmy Young (S). 12.03 pm David Hamilton (S). 2.03 Ed Stewart's Request Show (S). 4.03 Much More Music (S). 5.00 News. 5.05 Much More Music (S) (continued). 6.03 John Dunn (S). 8.02 Folk on 2 (S). 9.02 Humphrey Lyttelton with the Best of Jazz on Records (S). 9.55 Sports Desk. 10.02 Pop Score. 10.30 Star Sound. 11.02 Brian Matthew with Round Midnight, including 12.00 News. 2.02-5.00 am You and the Night and the Music (S).

RADIO 3

‡6.55 am Weather. 7.00 News. 7.05 Overture (S). 8.00 News. 8.05 Morning Concert (S). 9.00 News. 9.05 This Week's Composer: Schumann (S). 10.00 Byrd concert (S). 10.30 Moura Lympany piano recital, part 1 (S). 11.10 Interval Reading. 11.20 Recital, part 2. 11.50 BBC Welsh Symphony Orchestra (S). 1.00 pm News. 1.05 BBC Lunchtime Concert (S). 2.00 Matinee Musicale (S). 3.00 Kilpinen song recital (S). 3.30 New Records (S). 4.55 News. 5.00 Mainly for Pleasure (S) (‡ and mono only from 6.20). 7.00 Bach cantata (S). 7.45 Trade Unions and the Law: Discussion between Sir Andrew Shonfield and Lord Wedderburn. 8.30 Lutoslawski conducts Lutoslawski (S). 9.10 Sybils. 9.50 Robert White Latin-church music (S). 10.30 Jazz in Britain: The Bluenotes (S). 11.00 News. 11.05-11.15 Purcell (S).

VHF Only—Open University: 6.00-7.00 am and 6.20-7.00 pm and for Scottish students only: 12.00-1.00 am.

RADIO 4

6.00 am News Briefing. 6.10 Farming Week. 6.25 Shipping forecast. 6.30 Today, including 6.45 Prayer for the Day; 7.00, 8.00 Today's News; 7.30, 8.30 News Headlines; 7.45 Thought for the Day. 8.35 The Week On 4. 8.45 Patrick Moore with the BBC Sound Archives. 8.59 Continental Travel. 9.00 News. 9.05 Start the Week with Richard Baker. 10.00 News. 10.02 Money Box. 10.30 Daily Service. 10.45 Story Time. 11.00 News. 11.05 To the Far Corners of the Earth: 150th Anniversary of the Royal Geographical Society. 11.50 Poetry Please. 12.00 News. 12.02 pm You and Yours. 12.27 Brain of Britain 1980 (S). 12.55 Weather; programme news. 1.00 The World at One. 1.40 The Archers. 1.55 Shipping forecast. 2.00 News. 2.02 Woman's Hour. 3.00 News. 3.02 Listen with Mother. 3.15 Afternoon Theatre (S). 4.45 Short Story. 5.00 PM News magazine. 5.50 Shipping forecast. 5.55 Weather; programme news. 6.00 News. 6.30 Home Again. 7.00 News. 7.05 The Archers. 7.20 Science Now. 7.45 "Fathers and Sons," by Ivan Turgenov (S). 9.40 Kaleidoscope. 9.59 Weather. 10.00 The World Tonight. 10.30 Conversation Piece. 11.00 A Book at Bedtime. 11.15 The Financial World Tonight. 11.30 Today in Parliament. 12.00 News.

BBC Radio London

5.00 am As Radio 2. 6.30 Rush Hour. 10.03 The Robbie Vincent Telephone Programme. 1.03 pm London Live. 4.30 London News Desk. 5.35 Look, Stop, Listen. 7.03 Black Londoners. 8.00 Question Time from the House of Commons. 9.00-5.00 am Joins Radio 2.

London Broadcasting

5.00 AM with Bob Holness and Douglas Cameron. 10.00 Brian Hayes. 12.00 LBC Reports. 8.00 pm After Eight Special—Jennifer Jeremy reports on the work of Community Service Volunteers. 9.00 Nightline. 12.00 LBC Reports Midnight. 1.00 am Night Extra. 5.00 Morning Music.

Capital Radio

6.00 am Graham Dene's Breakfast Show (S). 9.00 Michael Aspel (S). 12.00 Dave Cash (S). 1.00 pm London Today First Report (S). 1.10 Dave Cash (continued). 3.00 Roger Scott (S). 7.00 London Today (S). 7.30 Adrian Love's Open Line (S). 9.00 Alan "Fluff" Freeman (S). 11.00 Tony Myatt's Late Show (S). 2.00 am Peter Young's Night Flight (S).

F.T. CROSSWORD PUZZLE No. 4,286

ACROSS
1 I'd turn and pose for measurement (8)
5 View an attitude in flying (6)
9 Spiteful woman with a hairdresser in underground excavation (8)
10 Decrepit car right in hole in road (6)
11 Courageously making lady ring (8)
12 Clammy article we precede in pen (6)
14 Audibly despatched wind instrument that titillates in a sense (5-5)
18 The mark of a murderer? (10)
22 Red tip could be quaking (6)
23 Prison food? (8)
24 Deeply embedded type of ornamentation (6)
25 Contemptuous person wrongly resides outside front of park (8)
26 Pulling to the side of stage (6)
27 Coming on stage to delight (8)

DOWN
1 Period of time that's rotten it's said (6)
2 Ridiculous literary composition? (6)
3 Tone of voice that could be grave? (6)
4 Involved in twist together (10)
6 Type of bottle making ship's company stop outside (8)
7 Alienate eastern leader with unusual following (8)
8 Staying behind and trying to admit soldiers turning up (8)
13 Typical of those opposed to the British? (10)
15 Sailor on stern to set free (8)
16 Old king's rule for dressing at table? (4-4)
17 An increase in mathematics (8)
19 Prosper heartlessly? It could be decorous! (6)
20 Strange offspring may be favourite (6)
21 Listen to excursion leader in late transport (6)

The solution to last Saturday's prize puzzle will be published with names of winners next Saturday.

New York music—2

Philharmonic premieres

by NICHOLAS KENYON

In early May the New York Philharmonic gave the world première of Krzysztof Penderecki's Second Symphony: it will be heard for the first time in Europe at the Edinburgh Festival. It is a baffling work. To those familiar only with the Penderecki of the *St. Luke Passion* or the *Threnody for the Victims of Hiroshima*, it will come as a shock, for the composer has turned his back on the trappings of the avant-garde — no tone clusters, no indeterminacy, no unusual techniques of any kind — and has produced a full-blooded romantic work that sounds like an imitation of Bruckner, fleshed out with Strauss at his most grandiloquent and Shostakovich at his most assertive. Even to those conversant with Penderecki's most recent developments, in the Violin Concerto and the opera *Paradise Lost*, the content of this latest piece must pose a problem. The idea for the work, the composer says, came to him on Christmas Eve last year, and he has incorporated into the piece the music of the carol "Silent Night" and entitled the whole a "Christmas" symphony. Happily, the carol does not dominate the music. But through the 25-minute work it occasionally interrupts the blasting of the brass, quietly gleaming on strings or wind like a tinselled Christmas card. It serves little function except to provide contrast with the louder material, and that sounds equally motiveless. There are some strenuous contrapuntal arguments, and some powerful attacks from the full orchestra. But I have rarely heard a new orchestral work that seemed on first hearing so obvious and so empty.

Looking through Press reactions in London back in 1966 to the *St Luke Passion*, which was generally well received, I notice that William Mann attacked its "powerful aroma of speciousness." It is difficult to avoid the conclusion that the aroma has now become exceptionally strong. I shall be delighted if further hearings of the work prove me wrong.

It has been an unfortunate season for the New York Philharmonic's premières. Zubin Mehta proclaims strongly his commitment to new music, and indeed programmes a good number of works. But they are tucked away, usually in the first fifteen minutes of a concert, so that everyone has forgotten them by the end of the evening. Their quality has been variable to say the least. With wholly new works, of course, quality cannot be predicted; yet there have been some modest successes in this field. Earl Kim's Violin Concerto, which Itzhak Perlman played with typical verve, is a vivid and lively work, loosely cast in the form of variations, effervescent, virtuosic, and wholly enjoyable. It would stand the transatlantic crossing. A new work for french horn and orchestra by William Schuman, part of a worthy but tedious project to provide new concerti for the section principals of the Philharmonic, turned out to be attractive, well-made and mellifluous in content. It was played by Philip Myers with creamy tone and supple phrasing, and left a pleasing impression.

It is in the field of imported new works whose quality ought to be known that objections have arisen. Josef Tal's Third Symphony (which Mehta brought to last year's Proms with his "other" orchestra, the Israel Philharmonic) could scarcely bear the weight of being the Philharmonic's one new symphonic work before the Penderecki: even heard twice, it has completely faded from my memory, leaving behind only a tinkle of nice marimba noises. A work for orchestra and electronics by Nono, *Per Bastiana Tai Yang-Cheng*, was a curious choice when far more compelling (though longer) Nono works await performance at the Philharmonic: in an uncommitted performance, this left a grey impression.

These performances instituted the unfortunate precedent of Zubin Mehta's speaking to the Philharmonic audience to "explain" a few points in the music. He surpassed himself at the season's other premiere early this year, *Gradations* by the little-known Soviet composer Vladimir Zagortsev, by making a passionate political speech about the repression of Russian composers. He said Zagortsev probably didn't realise his piece was being played in New York—yet in the programme book there was a charming, appreciative letter to the Philharmonic from the composer. Again, the piece was worthy, unexceptionable, and completely undistinguished.

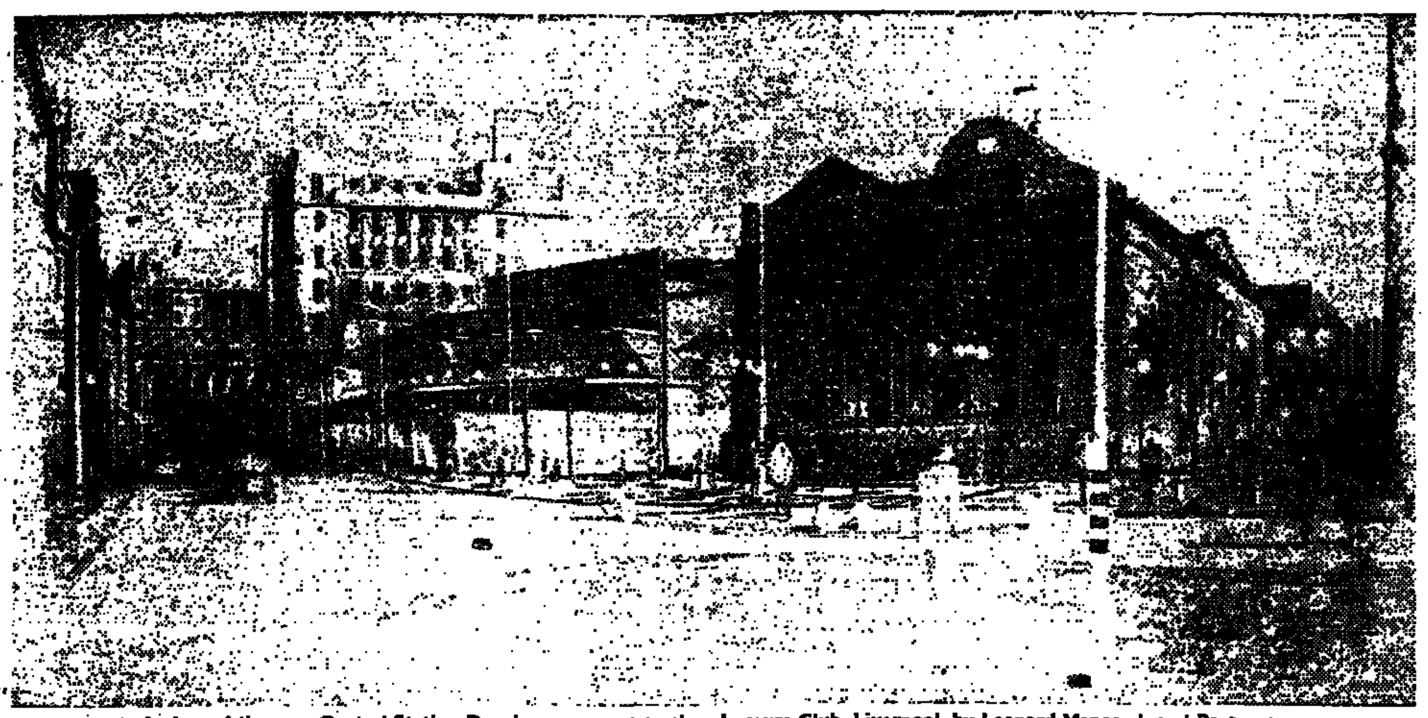
Zubin Mehta's direction of the Philharmonic has been popular with subscription audiences. But I have never found his concerts distinguished, and the orchestra sometimes plays very poorly indeed, with thin, acid string tone and ragged ensemble. An otherwise good account of Bruckner's Ninth was spoiled by a confusion among the first violins at the start of the slow last movement which should not have occurred in a professional orchestra; Berlioz's *Symphonie Fantastique* and Liszt's *Les Préludes* came off by means of Mehta's panache; Handel's *Messiah* was quite jolly, in an unidiomatic sort of way, and Mendelssohn's *Elijah* was excellent.

The best results at the Philharmonic this season have been achieved by James Levine and Andrew Davis. Levine conducted the fascinating Lyric Symphony of Alexander Zemlinsky (which Gielen will do in London with the BBC Symphony Orchestra next season); and Davis brought the Vaughan Williams *London* Symphony as well as the Strauss *Alpine*. Both made the orchestra play with cohesion and enthusiasm: there were still little slips, but at least the concerts were invigorating rather than enervating. A major problem at the Philharmonic is the subscription audience, which feels able to enter and leave the hall at any moment—it drifted out during the whole length of the Zemlinsky. It is clear that Pierre Boulez failed in his central aim of broadening his audiences' tastes. The Philharmonic must now find another purpose, and a new quality, lest it and its programmes stagnate completely.

Thames Television awards for dramatists

Thames Television has announced that three more playwrights have been nominated to join its Playwright Scheme. They are Gilly Fraser, author of *Blame it on the Boogie* (sponsored by the Royal Court Theatre), Catherine Hayes, author of *Little Sandra* (sponsored by the Playhouse, Liverpool) and William Grant, author of *Shona Dancing* (sponsored by the Perth Theatre).

The Thames Scheme offers £3,000 to the sponsoring theatre to encourage the development of promising talent, by selecting a playwright for a 12-month attachment to the theatre. In addition to producing one full-length play or other acceptable form of entertainment during the first nine months of attachment, participants are expected to involve themselves in other aspects of their theatre's work, thus gaining a first-hand awareness of the work of a theatrical director.



A view of the new Central Station Development next to the Lyceum Club, Liverpool, by Leonard Manasseh and Partners

Architecture

The Summer Show

by COLIN AMERY

There aren't many places in London, or anywhere else for that matter, where you can see displayed on the walls the drawings for a main drainage scheme, a new parliamentary building, an obelisk for a new town and a refitting station for submarines. These are just some of the submissions for this year's Royal Academy Summer Exhibiton on show in the architecture room at Burlington House.

The Summer Exhibition provides for architects, as it does for artists, a chance to exhibit a wide variety of work in an important setting in a show that is much visited by the general public. It is a chance for the top architects in the profession to be seen alongside young, adventurous newcomers. The criteria for selection are rather unknown: it is rather like the old procedure for selecting the leader of the Conservative Party—certain old favourites will always emerge near the top of the heap; there is a genuine chance for a complete outsider to dazzle the selectors by sheer brilliance and an equally fair chance that some of the very best runners will not even approach the course.

There are only 11 architect members of the Royal Academy and not all of them submit works. Some are too old and others prefer to show pictures that they have painted rather than show their buildings. In theory it should be possible to wander along to Burlington House and come away with some idea of the state of the art of architecture as practised in Britain today. This year the picture emerges quite clearly.

Architects now have few opportunities to build large and prominent new buildings; they are forced to convert older properties or blend new smaller buildings very carefully with their surroundings. The chance of seeing an imaginative tour de force is pretty rare.

An important example of the way things are going is the design for the Central Station Redevelopment in Liverpool by Leonard Manasseh. The importance of this scheme is that it stands next to the Lyceum Club, a major neo-classical building by Thomas Harrison that the Government purchased to save from demolition. Mr. Manasseh has a difficult task to design his shops and offices to complement the simple elegance of the Lyceum.

As his drawings in the Royal Academy show he has opted for a carefully underplayed design that has a simplicity and scale that harmonise discreetly with his neighbours. The drawings in the Academy hardly show more than a convincing outline of the scheme and the Royal Institute of British Architects would be doing everyone a good turn if it could display regularly good schemes like this one in some detail. There is a strong public interest in architecture and the presentation at the RA just whets the appetite.

Carefully fitting in with neighbours was a problem faced by the President of the Royal Academy and his architectural practice when they were commissioned to produce a study for the new parliamentary building to occupy the site across Bridge Street from Big Ben. Sir Hugh Casson's design is good neighbourly to the point of self-effacement. As it will never be built it is hard to judge whether this prominent public site was the right place to decide to be invisible or not. Architectural loss of nerve is not evident in another building designed for a sensitive site, a scheme for the new boarding house at King's School, close to Canterbury Cathedral. This is designed by the excellent firm of Maguire and Murray.

They show a very attractive model at Burlington House of a cluster of buildings that are traditionally designed—that is to say they are in scale and materials exactly what should be built on this site. Pitched roofs, garden walls, bays, courtyards, these are all the agreeable elements that will comprise this building. The model is lovingly built and does show a pleasing sensibility that is one of the eternal values of architecture. There is nothing slick or gimmicky here—just honest good building.

Some of the younger practices in the exhibition could learn a great deal from the integrity of a design like Maguire and Murray's. There are signs that in a serious attempt to come to terms with the current architectural climate some of the younger practices are ready to deal a pretty random selection of cards from the pack of styles. The climate is in favour of a renewal of traditional architectural virtues—careful scale, truth to materials, and the development of a language that is not unrelated to the world of buildings that we have all grown up with. This is not to say that architecture cannot be "modern" or belong to its own time. Now is the moment for an assertion of those architectural skills that are responsive to both a sense of place and the historical imagination.

There are, also, examples in the Royal Academy of designs that are nothing more than pieces of meretricious pastiche. But there are plenty of good things. I would particularly commend the Court House infill scheme by Trevor Dannatt, the new Faculty of Arts at Bristol University, and the new student rooms at Worcester College, Oxford, both by MacCormac and Jamieson, New Street at Milton Keynes, by Stephen Gardiner, Champagne Alley in the Kings Road, by Campbell Zogolovitch Wilkinson and Gough. There is a whole wall of drawings by Richard Rogers for his schemes at Coin Street, Lloyd's of London, and offices at Cambridge.

The draughtsmanship and technological preoccupations put Mr. Rogers in a class of his own and it is gratifying to see that he is now an Associate of the Academy. Another new architect associate is Philip Dowson who has for some years been one of Britain's best architects working with Arup Associates. His proposals for Worcester College, Oxford, show his distinctive sensibilities.

One of the advantages of the Academy is that it does give you some warning of troubles ahead. I suspect that the new Tolmer Square development by Renton Howard Wood Levin Partnership would look more at home in Dallas and the new building now rising at 66, St. James's Street by Rodney Gordon looks as though it might find it quite difficult to get on with its less flashy neighbours. No Summer Exhibition would be complete without a linocut by the architect Quinlan Terry—he remains unmoved by the tides of fashion and quietly produces a steady flow of modest buildings in the classical tradition.

I have only one grouse about the display at the Academy—why are architectural models hung on the walls as though they were paintings or reliefs? It is impossible to see how the buildings will look if they cannot be examined at eye level.

Bath Festival

Handel and Tippett

The Bath Festival calls regularly at Wells Cathedral, where on Saturday Handel's sacred oratorio *Belshazzar* was given. The performers were Andrew Parrott's Taverner Choir—actually formed for the Festival seven years ago—and Taverner Players, with excellent soloists. There were excisions, as always (one of the two duets, some recitatives and at least three arias). Handel insisted on giving the Haymarket audiences for his oratorios value for money, and an unabridged *Belshazzar* in a very chilly Wells Cathedral might have been less welcome than to the home audience for the Radio 3 relay, which may after all have been the last such relay for some time.

The west face of the Cathedral is still shrouded in scaffolding, but the acoustic side (if not the temperature) surpassed expectations for the oratorio. Only some two dozen strong, the Taverner Choir sounded full, taut and stylish as Medes and Persians, Babylonians and Jews, and at the diversion of the Euphrates they could call up fine voices from their ranks for the florid solo interjections. The Taverner Players aim at instrumental authenticity, but none of the familiar frailties that go with it were evident in their crisp concerted attack. Parrott paced an extremely lively performance, even over-excited in the latter stages (it ran almost half an hour shorter than predicted)—at any rate the players' fingers did not have time to freeze, and fake-Handelian ponderousness was kept triumphantly at bay.

Belshazzar lacks a strong protagonist, unlike for example *Saul*, and in fact the soft-grained tenor of John Elwes hardly offered the steel (or the clean runs) required for the name-part. Otherwise the casting was impeccable, with notable successes scored by the soprano Patrizia Kwella as Belshazzar's anxious mother, and by John York Skinner's counter-tenor prophet Daniel: after his brilliant first aria, it was a pity that he was rushed through "No! to thyself thy trifles be." (All the text is pithily eccentric: "Bel boweth down, Nebo stoopeth" even *sounds* like a Handel fugue-subject.) Carolyn Watkinson was a poised and kindly Cyrus, one of the less likely breeches-roles in the repertoire, and the bass David Thomas was firmly sonorous everywhere but in his slightly fuzzy diatribe against Belshazzar.

Altogether this was a vital, dramatically effective re-creation of a somewhat neglected score. Back in Bath next day, a Tippett celebration—yet another to mark the composer's 75th anniversary—made a different sort of effect. Tippett is not at all neglected these days, and the special interest of the recital lay in hearing what performers of a new generation can find in his music. In the case of Philip Mead, who tackled the second and third piano sonatas, the answer was glittering textures, cool athletic energy and little more. The strident lyrical edge which the earlier sonata shares with the opera *King Priam* was blunted; the Lento of the latter one brooded sympathetically, but its long Finale chattered on as if Mead discerned no shape in it whatever.

Martyn Hill sang "Boyhood's End" in a three-piece suit, freshly and brightly if without visionary intimations. Some similar emotional constraint narrowed the range of the cycle *The Heart's Assurance* too—but it must be said that the Assembly Room adds an uncomfortable glare to the sound of voice and piano, even with the scrupulous John Constable at the keyboard, and the cautious elegance Hill contrived was an impressive achievement. With Timothy Walker's guitar in the "Songs for Achilles" he reached further into Tippett's expressive idiom, though the pain and sense of loss in it were kept at arm's length.

DAVID MURRAY

Liège Opera Festival—1

Cyrano de Bergerac

by RONALD CRICHTON

The recent, week-long opera festival at Liège was part of this year's celebrations for the millenium of the city that was once a prince-archbishopric. These celebrations in their turn are part of the 150th anniversary of the independence of Belgium. Liège, with leafy parks and gardens and an admirably tidy river-front (the Meuse, rolling northwards towards Rotterdam, carries an impressive amount of barge traffic), is a prosperous-looking place, with plenty of history left among the tower blocks—no world-famous tourist sights but fine churches and museums, a vast princely palace and excellent restaurants.

The opera, now called the "Centre Lyrique de Wallonie," is housed in the early 19th-century Théâtre Royal in the city centre. In front is a statue of Grétry, a local boy (César Franck was born in Liège, too, but no opera house is likely to remember him). Beyond the statue is the site of the former cathedral of St. Lambert, gutted at the time of the French Revolution—some of the cathedral stone was used for the theatre. Remembering the makeshifts to which we are reduced for the housing of opera in our main provincial cities, it is sometimes painful to see how differently the ground is prepared in European countries.

The centre Lyrique, a lively, well-publicised institution, serving other Francophone towns as well as Liège, giving (ballet included) some 250 performances annually, designed an enterprising festival programme. The centre itself contributed the world premiere of a new Belgian opera, Paul Danblon's *Cyrano de Bergerac*, and a production on a smaller stage of Marcel Landowski's *Opéra de poussière*. They invited the company from La Monnaie in Brussels with their recent production (the first in Europe) of Menotti's *The Hero* and the Flemish Opera from Antwerp with *Idomeneo*. At the same time Liège was host to an opera film festival and an international opera congress attended by delegates from several lands—the first of a triennial series.

Intentionally or not the choice fell mainly on modern operas accessible to that majority public rightly believed to be shy of contemporary scores of any difficulty. The new *Cyrano* is a latterday example of the old traditional opera in five acts (nominally two acts and five) scenes, but those scenes are not short). The text of Rostand's play has been condensed by Raymond Rossius, the Liège Intendent, leaving Cyrano's big set-pieces more or less intact—Rostand is already operatic enough in style to provide abundant opportunity for solos, duets, martial scenes for the Cadets de Gascogne, ballets and an ensemble finale before the interval.

The composer Danblon, an intelligent, articulate and versatile man (scientist as well as musician, responsible for popular scientific programmes on Belgian TV), deliberately and unapologetically uses an easy musical language. The vocal lines are grateful to hear and to sing. Words come over pretty well and with them something of Rostand's unquenchable verbal panache, but the score is too mild-mannered to provide an equivalent musical virtuosity. And the gift of dramatic timing which could compensate for lack of adventurousness is not there. The battle scene and the death of Cyrano in particular need firm pruning.

The staging was a brave achievement for a medium-sized company. In the conventional way suitable for this score, the producer Philippe Rondest built up the big scenes effectively and was as successful as available talent would allow with the large cast of soloists. No allowances were needed for Cyrano himself, sung and acted by Gabriel Bacquier with apparently fathomless reserves of tone and physical energy—though the music does not strain the voice, the role is a long one. The Roxane was Andrée François, a French lyric soprano with a gentle top register, charming in the balcony scene—when this is set to music there are inevitable undertones of Elvira, Don Giovanni and Leporello.

Albert Voli, an experienced light tenor, sang Roxane's lover Christian. Armand Battel was his rival, de Guiche. The designs of Marie Claire Van Vuchelen, sometimes over-generous with hot colour in the interiors, were at their best in the battle scene. Roger Rossel conducted—more determined propulsion might have reduced the impression of length. The premiere of *Cyrano* took place on a Sunday afternoon. That evening the film festival opened with *Falstaff*, directed by Götz Friedrich and conducted by Solti—filmed in Berlin, recorded in Vienna—with Bacquier, again, masterly in the title role. No opera could have more sharply pointed the virtues of concision. Menotti, Landowski—and Mozart—must wait for another article.

Gabriel Bacquier as Cyrano

CRICKET BY TREVOR BAILEY

Woolmer and Knott back for Test

THE ENGLAND 12 for the First Test sees the return to the fold of two more World Series Cricket outlaws, Woolmer and Knott. Underwood is also included.

These selections are entirely logical if we are to field our strongest team. This is essential against the West Indies who are potentially the most powerful touring party to visit this country for a very long time.

Woolmer is a proven, in-form batsman, and an above-average fourth seamer.

Knott, in addition to being a world-class wicket keeper, has five Test centuries to his credit and a batting average of more than 30, which puts him into the all-rounder class.

Underwood is a great spinner and a match-winner in certain conditions.

The rest of the line-up is entirely predictable. The irresistable Botham, plus four batsmen—Boycott and Gooch, both very much in the runs; Willey, who played so well in the one-day international; and the brilliant, unpredictable Gower.

The three pace bowlers are: Willis, who has rediscovered his form of two summers ago; Hendrick, back to form after an operation; and the dependable Lever, who can bring left-arm variety to the attack.

The capacity crowds for both Prudential Trophy matches last week illustrate the appeal of limited-over cricket.

Playing these games immediately before the start of the Test series, instead of afterwards, gives them the impact and importance. However, three rather than two meetings are needed to provide a properly balanced competition.

It seemed strange when Clive Lloyd received the Prudential Trophy at Lords—on the basis of a higher run rate over two matches — immediately after England had won a thrilling game to level accounts. A decider would have been a natural and a sell-out.

Although there is a big difference between Test and one-day cricket, England's splendid last-over victory, set up by Boycott and Willey's opening partnership, could have a considerable effect on the series.

First, from the financial angle, it should guarantee bigger crowds for the first Test at Trent Bridge on Thursday. It has increased interest when hopes could have faded if England had lost easily.

Secondly, it has given England a psychological boost. The team has demonstrated that runs can be scored off formidable pace attack.

Thirdly, the opposition tended to panic under pressure, which was noticable in the field, at Headingley and Lords. They were also shocked by this unexpected defeat and now have a worrying casualty list. They could well be down to 13 players for the Test and these could include several "walking wounded."

Anyone who still doubts that it pays to be an opening batsman in limited-overs cricket, irrespective of the quality of the bowling, should look at the scores of the four who did; they all made runs.

The two captains, Vivian Richards and Ian Botham, have very limited experience in this role, which did show at times. Why did the best attacking batsmen in the world not come in at number three after the openers had provided a substantial base from which to launch a sustained assault?

Ian Botham is an outstanding attacking bowler, as his Test record shows. One of the main reasons for his success is that he bowls a very full-length and is prepared to experiment.

The half volley, for example, which swings late is a potential wicket taker, but at the moment Botham is not ideally suited to deliver the last few overs in a one-day game when containment not wickets is the prime consideration.

The West Indian tail found him easier to hit than Willis, who was the best and the most economical of the England bowlers, but did not complete his full quota of overs.

However I am sure that Botham will prove an inspiring leader, as he demonstrated so well with the bat in both Prudential games.

England: Botham, Boycott, Gooch, Tavare, Gower, Woolmer, Willey, Knott, Lever, Hendrich, Willis and Underwood.

TENNIS BY JOHN BARRETT

Paris—no place for the faint-hearted

TODAY MARKS the turning point of the European season. The emphasis begins to shift from clay to grass as players prepare for Wimbledon, now only three weeks away.

The fulcrum is the French Championships. The successful take part in torrid encounters in the second week. The defeated lick their wounds and cross the Channel as late entries to the Kentish Times Beckenham Tournament and the Cold Shield Northern Championships in Manchester.

Paris last week was no place for the faint-hearted. The two top American men were exposed to the tortuous demands of slow European courts.

The new U.S. No. 1 John McEnroe, suffering from back and ankle strains and a nasty blister on his playing hand, was eliminated in four enthralling tie-break sets by the studious and patient Australian Paul McNamee, who has added a double-handed backhand to his repertoire.

Jimmy Connors, the man supplanted by McEnroe at the top of the U.S. rankings, survived magnificently in five sets from match point down against Jean Francois Caujolle, the young Frenchman, also a left hander who had beaten him in Monte Carlo.

Both matches provided the classic contrast between attack and defence and gave us some spectacular rallies combining power with guile. The tension before 16,000 vociferous fans was considerable and court behaviour less than perfect.

There were altogether too many audible expletives and vulgar gestures for the good of the game and the fines of more than £500 imposed on the two Americans may act as a deterrent to others.

These 50th French championships, bursting with confidence and vitality, are a remarkable testament to the industry and drive of the French federation under the leadership of their energetic president Philippe Chatrier who combines that role with the presidency of the International Federation.

The development programme at the attractive 52-year-old site on the edge of the Bois de Boulogne, started in 1975, will be completed next year at a total cost of almost £3.5m.

This year the new circular No. 1 court was unveiled—a delightfully intimate amphitheatre with 4,100 seats each with a perfect view. Unfortunately the designers have perpetrated the same mistake as the architects at Flushing Meadow, in New York, where the stadium court contains pedestrian walkways on the inside of the arena so that it is impossible to prevent movement behind the players.

French teams will train in the new indoor courts built underground alongside the new No. 1 court in a building whose roof will normally support three all-weather courts but which is now the site of a talented commercial village.

The new Roland Garros mirrors the general health of the game in France. The federation confidently expects to enrol its 730,000th licensed player this year (650,000 in 1979).

Eventually it hopes to challenge West Germany where there are 1.2m registered players. The comparison with Britain is revealing: here 137,80 club players pay contributions.

The British interest in Paris ended abruptly yesterday. As expected, Buster Mottram lost 6—2, 6—2, 6—3 in a match unfinished from Saturday to the new Italian champion Guillermo Vilas.

The Argentine No. 1 now plays fellow left-hander Manuel Orantes of Spain and must then beat an American — either Harold Solomon or Brian Gottfried—if he is to challenge Bjorn Borg in the semi-final.

Virginia Wade fought bravely but unavailingly for 2½ hours in losing 6—0, 6—7, 6—2 to the Argentine No. 1 Ivaña Madruga—a third loss to the same girl in recent weeks.

Meanwhile, Chris Evert-Lloyd continues her comeback with growing confidence. Yesterday she recovered from a one-set and 1—3 deficit to score a 4—6, 6—4, 6—4, 6—3 win against Bettina Bunge, the Swiss girl born of German parents who lived for years in Peru and now resides at Coral Gables, Florida.

FINANCIAL TIMES
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Monday June 2 1980

Two-thirds of a loaf

AT THE beginning of her long wrangle with the rest of the EEC over Britain's budgetary contribution, Mrs. Thatcher said she would not settle for "half a loaf." It is now clear that she will not have to. The deal brought back from Brussels at the end of last week by Lord Carrington is a far better one than looked remotely conceivable after the acrimonious Dublin summit last November, when the Eight offered a rebate of £350m on what was meant to be a take-it-or-leave-it basis. It is also better than the deal Mrs. Thatcher rejected in Luxembourg in April, and can justifiably be presented as at least "two-thirds of a loaf."

In that respect, it can only be said that Mrs. Thatcher's tough negotiating tactics have been largely vindicated. From the very beginning it was clear, or should have been clear to the detached observer, that Britain had a strong case. It was not right that one of the poorest Community countries should be its chief paymaster; the British had a long-standing commitment from their partners that such an "unacceptable situation" should be corrected; and the size of the UK deficit was threatening further to undermine the commitment of the British people to European integration.

Trump card

Mrs. Thatcher's trump card, the threat to veto the latest round of farm price increases, in the end turned out to be a strong one. France's riposte, the counter-threat to go ahead with unilateral measures to help its own farmers, never looked particularly convincing. In the first place, the idea was firmly opposed by a number of other countries with strong farming interests. In the second, it would have been one of the greatest ironies in Community history if it had been France that delivered the most stunning blow yet threatened to the principles and practice of the Common Agricultural Policy, which have always been sacrosanct in French eyes.

What Mrs. Thatcher has achieved is only a small improvement in financial terms over the deal she rejected in Luxembourg for this year and next. But on top of that, there is now a provision for the system to be extended for a third year, if necessary, and the need for structural changes in Community spending has been recognised. This can only mean reducing the proportion of the budget spent on the Common Agricultural Policy. The rest of the package includes a settlement of the irksome Anglo-French lamb war, which is expensive for the Community but beneficial to Britain, and an innocuous statement on the Common Fisheries Policy. Britain has resisted French demands that it should abandon its formal right to veto farm price increases next year in exchange for a general pledge of good behaviour.

It is, of course, not perfect. Britain is likely to remain the second biggest contributor to the Community's exchequer and it is difficult to describe the outcome as constituting the "broad balance" on which Mrs. Thatcher originally insisted. There is no provision for what might happen at the end of the three specified years and there can be no guarantee that the Nine will implement the changes in the Community's financial structures that have been promised. The farm price increases are too high and the lamb deal is unpopular with New Zealand.

Ill-will

But it was always clear that the final result would have to be a compromise. In their own terms, the other countries have been more than generous. They have been pushed much further than they ever intended to go, and then a bit further.

If that is partly due to Mrs. Thatcher's tactics, it is also due to the other eight countries' recognition that failure could have placed unbearable strains on the Community, possibly leading to Britain's withdrawal. Moreover, however successful she may have been, Mrs. Thatcher has brought a great deal of ill-will on herself. If she has demonstrated that the threat to veto farm price increases is a powerful weapon, she has also demonstrated that it is not the ideal way of doing business in the Community. Within the next two years or so, EEC spending will reach the budgetary ceiling provided for under the present financial system. It is to be hoped that the Nine can agree sensible budgetary and agricultural reforms before then, without the need for Mrs. Thatcher to bring out the big stick once again. Meanwhile, Mrs. Thatcher and her Government should say a grateful "yes" to the latest offer, begin showing that Britain is also capable of enthusiasm about Europe, and help the Community to start tackling the other important challenges that it faces.

The perils of pay comparability

THERE COULD hardly be a clear object lesson on the perils of relying on "pay comparability" than the row over nurses pay which has broken out as a result of the recent pay increase for National Health doctors. Having come very near to accepting a pay offer within the Government's 14 per cent cash limit two weeks ago (on top of January's 19 per cent Clegg award), the nurses are now talking of industrial action to back a demand for 18 per cent, to match the doctors' increase. Their complaints against the 14 per cent offer are centred not on the shortages of nursing staff which many hospitals are experiencing, nor even on the fall in real living standards that 14 per cent may be argued to represent. What has really incensed the nurses is the insult which they feel they have suffered because of the Government's generosity to doctors.

Sympathy

Nursing is undoubtedly an honourable profession and higher pay for nurses is a cause which will command a good deal of public sympathy, at least so long as nurses are not tempted into heavy-handed industrial action of a kind which they have so far eschewed. But if a confrontation with the nurses proves unavoidable, the Government should not hesitate to underline the fact that the nurses' demands are a blatant product of the "culture of envy" which the Prime Minister has repeatedly denounced.

For, while it is certainly arguable that the Government was wrong to grant doctors an inflation adjustment of 18.7 per cent, on top of the 10.7 per cent comparability award which they had already been promised, this in no way justifies further profligacy in the treatment of nurses. The pay of workers for whom the Government is a monopoly employer must be a matter of Government policy, but the aim should be to ensure a balance between supply and demand for specific kinds of labour. It should emphatically not be to pass inflationary settlements from one group of workers to another.

In an economy steeped in inflation, a preoccupation with comparability and "fairness," which might be perfectly healthy in a non-inflationary society, unfortunately ensures precisely that mistakes are compounded, as each group of workers compares itself with those other groups which can be used to justify the highest pay increase. It is to prevent this kind of pay leapfrogging that the Government has imposed an increasingly savage monetary squeeze on private industry. Cash limits were supposed to mirror these monetary pressures in the public sector and, ever since it came to power the Government has been trying to explain the simple principle that, under these constraints, more money for one group inevitably means fewer jobs, or less money for someone else.

Unfortunately, the Government's own actions have, so far, belied its words. Cash limits have been adjusted or fudged to accommodate high pay awards. Even where job losses have resulted from excessive pay settlements, they have been achieved by cuts in recruitment, rather than through redundancies.

Welcome sign

Some of the health workers' leaders have, in fact, voiced this objection to the level of the doctors' pay increase, which is perhaps a welcome sign that the realities about the operation of cash limits are at last beginning to sink in. But if the nurses were worried about the effect that the Government's generosity to doctors would have on health service jobs or on the care of patients, they would not be clamouring for more than 14 per cent themselves. When nurses come to tea at Downing Street with the suggestion that relativities between them and doctors should be restored by reducing doctors' pay, rather than by increasing that of nurses, the Government will know that its attempts to destroy Britain's inflationary psychology have succeeded. Only then will it be safe to disinter the idea of comparability in public sector pay.

POLITICS TODAY

The Labour Party still on speaking terms

THE LABOUR PARTY has survived another conference intact, but it continues to be a close run thing.

It would be easier to describe what happened at Wembley on Saturday if, as is sometimes popularly supposed, there were only two factions—the left and the right, or the militants and the moderates. The trouble is that such a simple analysis defies the evidence. The divisions in the Labour Party run deep, but they are not clear-cut. There are all sorts of armies in the field, but it is far from certain with whom they will finally ally.

Here are just two initial examples of the way loyalties have not yet been decided. Mr. Anthony Wedgwood Benn, who wound up the conference with the claim that "welfare capitalism is no longer on offer to the people of this country," received a standing ovation. Or rather he did up to a point. The delegates from the trades unions conspicuously remained seated; so did the great majority of Labour MPs. It was the delegates from the constituency parties who cheered.

So the unions support Mr. James Callaghan, the Party leader? Far from it. Mr. Callaghan received no applause at all when, in the central part of his speech, he stressed the case for incomes policy. Several union leaders went to the rostrum afterwards to attack him for his presumption. Thus the unions do not like the former Prime Minister for his continued emphasis on wage restraint. But neither do they trust Mr. Benn.

Something somewhere is missing, both in terms of policy and personality, around which the Party can unite. Paradoxically, it may be the absence of strong leadership which holds the Party together. Since nobody has yet won, hardly anybody is threatening to leave.

Yet the battles continue. The most interesting news to emerge from Wembley is that the left—by which is meant that section of the Party, mainly from the constituencies, which groups itself around Mr. Benn—is worried. It is worried because it believes that the gains it made at the annual conference last autumn are in danger. The gains concern mainly the mandatory re-selection of MPs and the control over the Party Manifesto.

The counter-attack has come from the Campaign for Labour Victory, a grouping whose best-known associates include Dr. David Owen, Mr. William Rodgers and Mrs. Shirley Williams. The CLV has hit back by stressing the generally unrepresentative nature of the National Executive Committee, which is currently dominated by the left and which produced the policy statement debated at Saturday's conference. Some of the major trades unions have also called for the reform of the NEC in their evidence to the Commission of Enquiry into the future organisation of the Party.

It was the signs that the campaign for changes in the NEC was gaining ground that set the alarm bells ringing on the left. There can be no mistaking how seriously Mr. Benn and his supporters take the threat. A new committee, known as the Rank and File Mobilisation Committee for Labour Democracy, was formed last week in order to mobilise opinion in the constituencies around Mr. Benn's views. The Trotskyite Militant Tendency has been invited to join.

An editorial in the committee's first publication begins as follows: "Let there be no doubt as to what is happening. Last year's gains for democracy are in danger. Opponents of reform led by a majority of the Parliamentary Labour Party, a minority of trade union leaders, and the Campaign for Labour Victory, are determined not just to reverse the modest democratic advance achieved at Brighton, but to completely do away with the influence of the rank and file."

Essentially the struggle is about who makes party policy; the Parliamentary Party or the annual conference dominated by the NEC. Mrs. Frances Morrell, a close adviser to Mr. Benn, told a lunchtime meeting at Wembley on Saturday that the Mobilisation Committee was playing for "very, very high stakes." There would be, she claimed, "a fundamental alteration in British politics" if the Labour Party in Parliament was pledged to carry out Labour Party policies.

Mr. Reg Race, a Labour MP who supports Mr. Benn, told the same meeting that the aim of the Parliamentary Party was to replace such left-wing members of the NEC as Mr. Benn, Mr. Eric Heffer and Mr. Dennis Skinner by people like Mr. Denis Healey, Dr. David Owen, Mr. Eric Varley, Mr. Roy Mason and Mr. William Rodgers. The names of Mr. Healey and Dr. Owen were booed by the audience. The name of Mr. Varley was greeted by shouts of "Who?" Those of Mr. Mason and Mr. Rodgers were hissed.

The left is worried that conference gains are in danger.

Mr. Benn puts the case for the changes he wants with less venom but more guile. "I believe we've got two parties, the Parliamentary Party and the Labour Party, and our reforms are really designed to do two things: to give Labour MPs a bigger voice in government, but, and this is the countervailing element, to make them accountable to the Party." It is still the same case: namely that policy should be made outside Parliament.

Terry Kirk

Mr. Callaghan—showing a new determination and no signs of imminent retirement.

As it is, Mr. Benn and his supporters have every reason to be concerned. There are signs that the more moderate members of the Party are coming together again. Mr. Rodgers and Mrs. Williams have ended their flirtation with the idea of a third or fourth party, and are again working from within. There was a time when Mr. Rodgers and Dr. Owen almost stopped seeing each other when the former was thinking of going off on his own, but all that is over.

There are also others, less involved in infighting over the Party's constitution, who can hardly want Mr. Benn to prevail: Mr. Roy Hattersley and Mr. Peter Shore, for example. Besides, as already indicated, Mr. Benn cannot be sure of the support of the unions. The battle will be resumed at the annual conference in Blackpool in the autumn, but even then the results may be inconclusive.

If only it were all as simple as that: a wrangle over the constitution. There is also the matter of policies and personalities, and not least the position of Mr. Callaghan. Mr. Callaghan did not behave at Wembley like a man who plans to retire in a few months' time. Indeed he seems to have come back from China with a new determination. He stood up to the unions on incomes policy and he stood up to the left on unilateral nuclear disarmament.

A man who says that "free collective bargaining as practised at present produces neither social justice nor equity" and who warns that there must be a "firm and clear understanding" with the unions on the criteria against which wage increases will be measured *before* the next general election does not look as if he is preparing to quit.

The case of Mr. Callaghan's staying beyond the autumn is twofold. First, he may be able to reach an agreement with the unions on incomes policy in a way which nobody else could. Certainly he believes so if this would be the culmination of his career. Second, the claims of his would-be successors are not great enough to necessitate a decision this year. There would still be time for a new leader to establish himself before the general election if Mr. Callaghan stays at least until 1981.

The case for his going is that he can do so gracefully. If he stays beyond the autumn, he risks the development of a "Callaghan must go" movement. Even among former Ministers who have been most loyal to him, though who are not of course disinterested, there is a feeling that he should go, and probably will.

For the moment nobody knows, perhaps including Mr. Callaghan himself. Mr. Healey, the most obvious beneficiary from an early leadership election, ought to have it out with him in private in the not-too-distant future.

Since we do not know who the new leader will be, and the outcome of the constitutional struggle is still uncertain, it is even more difficult to make predictions about future policies. The document before the Wembley conference was exposed for what it is: a ragbag of old resolutions stitched together without any kind of intellectual distinction.

As Mr. Heffer pointed out with obvious gratification from the platform, the policy statement was attacked far more by the so-called militants for being too moderate than the other way round.

The most trenchant criticisms came from Mr. Eric Deakins, a former junior Labour Minister. It was impossible, he said, to have planning agreements without a national planning framework, yet the document says nothing about it. In any case, who would administer them? The Treasury? Not a very satisfactory solution from a Labour point of view. The whole of the statement, he went on, was based on the assumption of high economic growth. Yet it was precisely that that successive British Governments had failed to achieve, and there was even less reason to assume high growth in the future.

Mr. Deakins's remarks could have come equally well from the left or the right: either way they exposed the weaknesses of the document. The other gap concerns incomes policy, about which the document says nothing, and was exposed by Mr. Callaghan.

Mr. Heffer promised that the Party's rolling Manifesto, which will be published before the autumn conference, and updated every year, will be considerably more radical. But that is not the point. The statement debated and overwhelmingly approved on Saturday is not so much radical as unthinkingly reactionary.

It is written as if the failures of the past—the inability to achieve growth or the redistribution of wealth, the establishment of inefficient and unpopular bureaucracies—had never taken place. It assumes that Labour was voted out of office not because it intervened too much, but because it intervened too little. It promises bureaucracy writ large. It has no human face.

And yet that criticism is obviously not true of the Party as a whole. It is still on speaking terms. It still makes jokes. The conference is still unpredictable.

The message that people like Dr. Owen and Mr. Rodgers took away from Wembley was that it could have been worse. The first year or so in opposition is always bad as the Party fights over the past. But the divisions so far have not solidified. There is time to learn from past mistakes and to formulate new policies before the next election. There may have to be a fight to the death and a party split at some stage, but certainly not yet and maybe not—the thought is sometimes heard—until the Party loses again in 1983-84.

One's own view continues to be that the future of the Labour Party depends on what happens to the Conservatives in office. If the Tories' economic experiment works, it will be futile for Labour to fight the election on a platform of state controls, planning agreements and nationalisation. Equally, if the Tories now come to terms with Europe and show that the relationship works, it will be pointless to campaign for British withdrawal.

There are signs of the more moderate members coming together again.

Meanwhile, the fewer specific commitments that Labour makes, the better. The task is to show that Labour can again become a thoughtful, imaginative and human party. The intellectual tide in the country is still running for the Conservatives. It will not be reversed simply by offering old policies that have been shown to have failed.

Malcolm Rutherford

MEN AND MATTERS

Promotion by poll for Julien

Journalists on Le Monde, the mighty newspaper French Governments love to hate, yesterday completed the unique process of electing their next editor. The choice, doubtless to the chagrin of President Giscard, appears to herald a further swerve to the left in 1983 when *the victor*, Claude Julien, takes over from Jacques Fauvet.

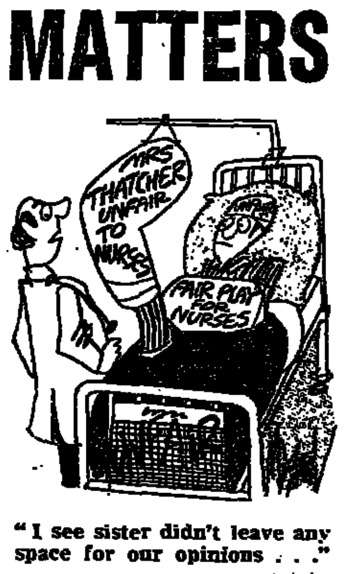
Known for his strong leftist views, Julien has been criticised by colleagues for the alleged bias towards the third world which has characterised his style of editing the paper's monthly supplement, Le Monde Diplomatique.

Yesterday, however, after three months of inconclusive balloting, Julien scraped up the necessary 60 per cent of the journalists' vote to ensure his elevation over the head of compromise candidate Alain Jacob, Peking correspondent.

In his 29 years on the paper he has seen it develop into an institution in the French-speaking world, unrivalled in influence and with a defiantly independent staff of writers. Indeed, the journalists have taken extraordinary steps to protect their right to publish what they, rather than their proprietors, see as the correct view of France and the world. Their sense of security is nicely bolstered by their 40 per cent shareholding in the paper—a blocking minority.

"He is not a Marxist," says one journalist who voted against him, "but he is very dogmatic." Evidence of this characteristic is to be found in a recent book in which the editor-elect wrote of Press men: "Those who try to think and write have no option but to reveal what all authorities try to hide. That is the duty imposed on anyone who wishes to observe, analyse, understand and explain."

Subtle, too, Julien yesterday assured his colleagues that under his editorship Le Monde would not become, like the fatherly connections attempt to take advantage of generous commercial laws.



"I see sister didn't leave any space for our opinions . . ."

supplement, "a journal of opinion," but "a journal of opinions"—a difference that is even more obscure in French since it has to be spelled out.

Sharks ahoy

Regardless of the questioning looks being cast in the direction of our police force at home, overseas opinion of the thin blue line—which made its reputation in Anguilla and reinforced it in Zimbabwe—remains as high as ever. Word has spread to the Cayman Islands, where, I am told by Jim Stowers, an assistant chief constable from the West Country, the people are "keen to develop a policing style similar to that now operating in Devon and Cornwall."

Keen to help, Stowers exchanges his blue serge this month for tropical kit and heads west to become Commissioner of Police in this financiers' paradise.

The indigenous population, largely descended from British seafarers—including pirates and castaways—is said to be the most law-abiding in the Caribbean. But as Stowers learned during a recent two-year attachment to the islands' CID, the jolly roger has been sighted again as buccaneers with god-

A race apart

My disclosure last week that horse racing had been exempted from the ban on gambling in the Ayatollah's Iran may have been premature. It seems the religious proletariat considers the sport of kings an inappropriate diversion in these revolutionary times.

I gather that after only two days of racing a group of zealots moved in to unseat the bookies. The complex at Farahabad has been occupied, the invaders say, because it has become "a centre for gamblers, prostitutes, counter-revolutionaries and foreign elements."

Now the course is being used as a transit camp for drug addicts. More than 3,000 have been rounded up and will be held under starter's orders before being dispatched to less congenial surroundings in prison.

The wholesale forgiveness of former enemies of the people continues apace in China. The Shanghai chamber of commerce, for example, is currently boasting that more than 50,000 former industrialists and businessmen have been brought back from exile in the paddy fields to work once more in the city. They even have equal rights, the chamber says, "the same as other workers, and they can even stand in company leadership elections."

All fine and good. But I feel that rehabilitation fever seriously affected the sense of perspective of the organisers of a recent celebration to commemorate a man described as "an outstanding military and political leader who played a progressive role in the development of society"—Genghis Khan.

Pot-shots

Although most of the flak has so far flown their way in the battle over the alleged dangers of the herbicidal brew 2,4,5-T, the farmers and foresters who are kept in business these days by such chemicals have now launched a vigorous rearguard action.

Accusations of damage to human health, they say, are all eye-wash. And they claim authorities in Oregon were gulled into accepting the charges as proven when they banned the use of the chemical in the Alsea forest region where the "killer spray" scare started.

The Government should examine not the health of country dwellers but the contents of their ashtrays. There, farmers claim, will be found traces of the second most popular smoking material in the States: shreds and ashes from a plant which is particularly susceptible to the effects of the chemical in question.

"The marijuana connection," says Robert Matthews, a director of the Washington Forest Protection Association, is the reason why the campaign against 2,4,5-T is being waged with increasing fervour and now extended to include most other weedkillers in use in the U.S.

According to Matthews, backed by the local sheriff, the isolated forest area of Oregon where the whole controversy started, contained one of the heaviest concentrations of illegal marijuana plantations in the state. How curious, the beleaguered foresters note, that where ever the protests are strongest there are also bloom the lushest crops of *cannabis sativa*, nestling between the weed-choked trees.

No choke?

"I am sorry it took so long," a kibbutznik told a U.S. visitor after a four-hour walk round the collective.

"Think nothing of it. Back home it takes me three days to drive across my farm."

"What a coincidence," the guide replied, "we used to have a car like that."

Observer

FINANCIAL TIMES SURVEY

Monday June 2 1980

MATERIALS HANDLING

Contents

Today's complex materials handling industry faces a challenging and potentially highly rewarding future as it responds to the growing sophistication in many industrial sectors.

A large and diverse industry

By Hazel Duffy

MATERIALS HANDLING is an essential and frequently high-cost element in the production and movement of goods and materials to the point of consumption. The term covers the handling of component parts in the factory during the process of assembly, the movement of bulk materials in, for example, steelworks, coalmines and chemicals factories, as well as the storage and distribution of products, and the movement of freight, and passengers, at ports, airports and so on.

The huge range of materials handling requirements has led to the creation of a large and diverse industry which can design and instal a completely automated warehouse at one end of the scale to providing a replacement piece of lifting equipment at the other.

As an industry, it faces a challenging and potentially highly rewarding future as it responds to the growing sophistication of production and extraction methods. But to many manufacturers faced with declining order-books and intensifying competition, the more immediate future of corporate investment plans is what concerns them most at the moment.

The proportion of handling costs to the total costs of production is surprisingly high. Government studies have estimated that as much as 15 per cent of gross national product can be attributed to the cost of handling, which means that if this bill could be cut by just 10 per cent, industry could be saving itself in the region of £180m annually.

Many companies are aware of this part of their costs, and take steps to ensure that this aspect of production is closely watched. The output statistics of the handling equipment industry over the past five years suggests that investment in this type of equipment has held up reasonably well at a time when other items of capital equipment have shown a more cyclical trend.

There have been exceptions, however, and these have been found particularly in companies making equipment for the steel industry, for example. The slump in investment by the British Steel Corporation has meant hardship for some manufacturers of heavy-duty overhead cranes, for instance, while the slowdown in investment by port authorities following the re-equipment for containerisation has led to very difficult times for the manufacturers of dockside cranes.

North Sea

More recently they have gained some alleviation by the increase in construction and development work in the North Sea which is now being won by British companies.

The slump in steel has also been offset, to some extent, by the continued investment from some other major industries, notably the National Coal Board. Adamson Butterley, for example, a company which did a lot of steel work, has recently won an £8m contract for a mechanical handling plant at the Selby coalfield. The project covers a computer-controlled plant which will include high-speed conveyors, specially designed feed hoppers at conveyor junctions, a coal- and stone-loading station, and the housing and steel structure for a coal bunker.

A contract like this for bulk handling can keep a factory in business for a year and more, but they are few nd far between. The manufacturers of factory equipment for unit handling, such as overhead travelling cranes, hoists and conveyors, are concerned that the drop in investment this year, and probably next, will involve mechanical handling this time. Most companies are expecting this year to be difficult. The lift truck industry, for instance, which is sometimes taken as an indicator of economic prosperity because they are used extensively in warehouses, is this year expecting a drop of 10-15 per cent.

In the eyes of forward-looking companies, modern materials handling methods are linked with greater efficiency. The high cost of labour in all industrialised countries make it increasingly attractive to invest in systems which require lower manning levels, although it could be another couple of years before many companies can see their way to making investments of this type.

Interest in automated handling has been less apparent in Britain than several other countries, mainly because labour costs are lower in relation to Japan, West Germany, and the U.S., the countries which have gone furthest down this road. After several years of Government financed research, Japan expects to have a totally automated factory functioning as a pilot project within the next couple of years.

Britain has been much slower to see the advantages of automated and semi-automater processes. Two big projects which will do something to dispel this image, however, are the Ford engine plant to be commissioned in South Wales, and the re-equipment at Longbridge where BL plans to bring out the Mini Metro this autumn. Both have invested heavily in advanced conveyor systems, for example, and overhead tracking, as well as robots at Longbridge for spraying and welding functions.

Robots are only now being developed which will be used for the loading and unloading of machines during the various stages of the production process. But there is considerable scope for speeding up the process of handling, which does not have to go as far as waiting for robots.

Better methods

The Institute of Materials Handling, set up by the Department of Industry last year to investigate methods of cost saving by the use of better handling methods, has been looking at ways in which this can be done. In the area of machining, for instance, investment in NC machine tools is high, but the items to be machined are frequently put on and taken off the machines manually.

The Institute has been talking to manufacturers of electronic and mechanical equipment, users and professional engineering institutions in an attempt to increase the awareness of the potential of improved methods.

The number of companies which can bring together the electronic and mechanical parts in a systems approach to handling are relatively few. One such company is Demag, the German group which has a subsidiary in the UK that has designed and implemented advanced warehousing systems, including a central warehouse for Lever Brothers. It believes that package systems involving a degree of electronic controls will become a growing part of its business (which is primarily making cranes and hoists).

Other companies include FATA (now part of Babcock and Wilcox) which specialises in warehousing and distribution systems, while GEC's handling activities, combined with the group's electronics expertise, obviously have the potential for advancing this type of work.

The demand for package systems, whether complete or for a part of a company's handling requirements, can be expected to grow. The traditional pattern of buying, for example, a batch of new lift trucks when the existing ones need replacing, is probably still dominant.

But there is an increasing interest in linking that purchase with, for instance, stacking equipment which will make greater use of a factory or warehouse space, and linking these with other items of equipment. This type of demand requires that the equipment manufacturing company has some in-house expertise in the designing of applications, either to be done alone or in conjunction with the production planning team in the customer company.

Movement of goods is not the only concern of handling. The rapid expansion in air travel has led to ever greater demands being put on airport handling, and this at least promises to be an area where it will be impossible to hold back on investment. The construction of new ports and docks, and modernisation of existing dockside facilities, also continue to hold prospects for companies which are concerned about the home market.

Competition will be tough, however, as it is in all areas of engineering. The materials handling industry does not have a distinguished productivity record, again in common with most sectors of British engineering, and this in spite of the fact that some at least are good advertisements for their own products.

New markets

In some sectors, conveyors, for example, manufacturers have tended to turn their eyes towards exporting only when the home market has proved unrewarding. Not surprisingly, they find they are up against established competition from other countries.

The serious situation facing companies in the heavy cranes sector has been growing apparent from the recent financial results, and it would not be surprising if the next couple of years brought further rationalisation. Even for lift trucks, which have been a buoyant sector for most of the 1970s, the outlook is less clear. The sector suffers from world-wide overcapacity and a highly developed international trade.

Despite the world economic situation, htere are still many opportunities for the efficient, well-run company. Some parts of the industry might do well to widen their concentration on purely product concern to include more of a systems approach, although this is difficult to do at a time when financial constraints within the company are most pressing.

For those companies with the resources, the need is to look increasingly at the handling methods of the future. This will require more attention to the bringing together of mechanical and electronics expertise, an area where British industry has not shown itself to be innovative in the past.

MECHANICAL HANDLING—U.K. SALES

	1978 £m	1979* £m
Conveyors, aerial ropeways	273	281
Cranes and transporters	215	202
Lifts and escalators	88	90
Lifting and winding devices	108	108
Industrial trucks and tractors	347	365

*Estimated. Source: Department of Industry.

A Linde 14,000 lb diesel fork truck, available from Roche Mechanical Handling, lifts timber at a Kirkby stockyard.

MATERIALS HANDLING II

Big battle for export orders

MATERIALS HANDLING is a diverse industry, and the degree of internationalisation varies substantially from one sub-sector to another. At one extreme there is a readily exportable product like industrial trucks which has helped this industry to become highly internationally conscious. At the other there are items such as heavy-duty cranes which have tended to be supplied very much on a domestic basis.

The traditional concepts of what can and cannot be exported, however, are changing. The severe downturn in big industrial and port projects in the UK, for instance, has forced manufacturers of heavy cranes to look overseas for orders. They have had some success, notably in the Middle East development projects, but not enough to detract from the serious situation they face in the home market. The conveyor industry has also tended to be largely domestically-orientated, but the growth of industrialisation in some of the developing countries is creating new opportunities.

Competitive pressures on the whole of the materials handling industry can be expected to increase over the next couple of years. Although parts of the industry have done better than manufacturing industry generally over the past five years, it will certainly find it more difficult to sell its products in the gathering recession. For the British industry there is the added problem of selling in a currency which is valued on oil revenues and current high interest rates.

The continuing strength of sterling has undoubtedly upset the calculations of many companies. For the multi-nationals, some shift in the sourcing of components will take place, but for the wholly UK-based company, this option is not available. The effect on those companies which are involved in exporting—and that applies to a fair section of this industry—is that margins will be squeezed and new investment programmes, which are essential for the longer term increase in efficiency needed in the industry, will be delayed.

Project links

Exports of certain materials handling equipment are linked increasingly to total projects, and this has tended to make it easier for countries which enjoy well-established process plant industries. For example, the conveying equipment required for the expansion and modernisation of a coal mine in Egypt, a project which has been won by a German consortium, stands a good chance of being awarded to a German manufacturer.

British industry has tended in the past to be poor at organising itself into consortia, and projects requiring materials handling have been no exception. There has been some improvement recently, however sometimes linked with a greater effort by the nationalised industries to help get overseas orders for their suppliers. The National Coal Board has set up a company for this purpose, and it may well be that there is a need for a similar organisation in the steel industry.

The coal industry's investment plans, in particular, have proved a welcome boost at a time when many of the big steel industry expansion schemes, which bring valuable orders for materials handling, have been cancelled. The Selby project, for instance, has brought considerable work to the industry, and the added benefit that it is a showcase mine for overseas buyers to visit. Similarly, the technical challenge presented by North Sea exploration and development is increasingly being met as far as handling requirements (heavy cranes for oil rig construction) are concerned by British companies, and this will stand them in good stead for overseas work.

On a much smaller scale, there has been an attempt by the trade association for the conveyor industry, and its NEDO sector working party, to promote exports. The industry has traditionally exported less than 20 per cent of its production, and it was felt that this could be improved. The West Germans dominate international trade in conveyors, partly because of their strength in process plant, and the Americans are also strong competitors.

A survey carried out for the industry identified certain developing countries as holding most potential for the UK industry, and it was decided to set up an office in Caracas to investigate possibilities in the Venezuelan market. The project has the support of 10 leading manufacturers. The response in terms of inquiries in Caracas has been good, although it is recognised that the project must be seen on a longer term basis. If orders are forthcoming the effort will have shown how several companies which probably could not spare the resources to establish a physical presence in such a market can join together with the help of their trade association. It is, after all, only doing what the German industry has been doing for years.

Competition

The industry making lifting and winding equipment, which covers a whole range of items like hoists, winders and lifting tables, etc., for use in a multitude of situations, is much more export-conscious. The products tend to be standardised and therefore produced in reasonable volume. The industry is increasingly confronted by lower-cost competition from developing countries, and may well find it difficult to hold on to traditional markets.

The lift industry, covering passenger and freight lifts, escalators and passenger conveyors, is closely tied in with new building projects and refurbishment. Exports have shrunk over the past few years, and there is concern about the state of the industry generally. Servicing is an important element in selling such goods, but there is a growing problem that this is increasingly being done outside the manufacturers.

Manufacturers of industrial trucks tend to take an international approach to markets. As with lifting and winding equipment, the product is fairly standardised, although frequently adapted for particular customers. It is not an industry which has so far been threatened by low-cost competition from developing countries, and, in spite of worldwide overcapacity, there are still many manufacturers which are expanding. In many respects industrial trucks are quite unlike other sectors of materials handling, frequently being purchased or hired on their own rather than in conjunction with a handling package.

This advanced narrow aisle rider-reach truck is the latest addition to the Crown range and it is being launched in the UK at the International Materials Handling Show which opens today at the National Exhibition Centre, near Birmingham.

The industrialised countries offer little scope for further growth in this market, other than through normal economic expansion. For this reason there will be tighter competitive pressure on manufacturers over the next couple of years as they all try to export what their home markets will not be taking up. The UK industry could find itself adversely affected because their own market is now more attractive to importers, particularly the Germans, who find that they can now compete on price terms, while export margins are getting less attractive. It would be no surprise if some rationalisation took place. In the longer term the surviving companies will find themselves in a stronger position, having been forced to improve on their efficiency.

No sector of the handling industry, not even industrial trucks, can point to established success in export markets. All too often exporting has been haphazard and has failed to concentrate on particular areas. The industry will find that it must capitalise on those items where it has earned a measure of technical advantage, and at the same time become more competitive both on price and other factors.

Hazel Duffy

More innovation by UK's industrial truck sector

THE INDUSTRIAL truck industry is the largest single entity in the mechanical handling sector, with an estimated output of around £365m in 1979. By far the largest part of the industry is concerned with forklift trucks, the remainder including such products as sideloaders and straddle carriers, industrial tractors and pallet, platform and stillage trucks.

Britain has a strong manufacturing presence in this industry, and can claim several innovations which have now become standard items, such as the narrow aisle reach truck. It is well represented at the heavier end of the industry, with companies like LancerBoss and Lansing Henley making sideloaders, and offers a very full range of equipment in the medium category.

There is some concern, however, that there is not enough presence in the small electric truck sector, where the Japanese, using volume production techniques, are particularly strong. For electric trucks overall, the UK market is highly developed. It splits about equally between electric and IC (internal combustion—that is, petrol, diesel, lpg), which is a considerably higher proportion of electric trucks than most other developed markets. Interest in electric trucks is growing worldwide although there are still technical drawbacks to making larger-sided electric trucks.

The major truck manufacturers in the UK are Lansing Henley (which came about by the merger of Lansing Bagnall and Henley), Coventry Climax (owned by BL), and LancerBoss, and on the multi-national front, Britain is the main manufacturing base for Hyster, Eaton and Caterpillar. There are also numerous smaller indigenous companies providing for particular needs, like Crown, which specialises in pedestrian controlled trucks.

Lift trucks are an indispensable item in every factory, warehouse, delivery bay, or anywhere where items need to be carried and stacked. Larger models have also become essential equipment in ports with the advance of containerisation. Over the last 20 years, demand has built up quite rapidly, with the exception of the odd year or so when the economy was in recession. But today, the UK market is considered to be mature. Any growth in demand will depend on the rate of expansion in the economy.

Some commentators are more cautious about future growth. They base their reservations on the increasingly sophisticated methods of handling which are being developed for factories, cutting the need for lift trucks to move items from one part of the factory to another during the manufacturing process.

There seems to be little recognition in the industry of the way that such technological advances could change the outlook for lift trucks, although one or two companies are believed to be drawing up plans.

Versatility

Most manufacturers take the view that the lift truck will be irreplaceable for many years to come, and that developments will be increasingly on the lines along which they have already started, namely in greater safety and comfort for the driver, quieter and more efficient engines, as well as more versatile trucks.

This year is expected to be difficult, in common with most parts of industry which are making items of capital equipment. Investment had started to fall off last year after the high levels of the previous 12 months, and most forecasts are agreed that there will be a further cutback during 1980. The lift truck industry does not expect to escape these strictures in the economy, and the expectation is that UK production will be in the order of 12,500 trucks, about 10-15 per cent down on last year.

Britain is traditionally a net exporter of trucks. In 1978, exports totalled £138m against imports of £78m. The underlying trend in 1979 was difficult to detect due to the interruptions caused by industrial disputes. It seems likely, however, that exports were slightly up on 1978 and imports well up. If this is the case, they reflect some worrying aspects about this industry.

Imports have been creeping up throughout the 1970s to take 29 per cent of the market in 1978, and probably one-third last year against 14.5 per cent in 1970. Some are due to the UK-based multi-nationals bringing in components from overseas subsidiaries, but mostly they are finished products.

Exports, on the other hand, have displayed a more erratic trend over the past few years, managing a big jump in 1977, but only edging up slightly since.

The export constraints in lift trucks are common to most sectors of the engineering industry. Costs are too high, productivity too low, and the high exchange rate both makes exports feasible only if companies are prepared to trim their margins, and at the same time makes imports more attractively priced. Although there has been a tendency in industry to bemoan the problems of the pound to the exclusion of more positive noises, it certainly does not make life any easier when the product is as price-sensitive as in this industry.

The remedies lie in promoting increased efficiency, and probably in concentrating on the technology that will be required in five years time. Coventry Climax, which suffered a considerable loss of market share last year, has only recently got around to rationalising its production after the merger with Conveyancer. It also brought out new models recently, including the Tough Terrain, and thereby hopes to regain its former share.

Climax's exports amount to about 25 per cent of output, which is not high for this industry. Last year, they were hit badly by the loss of the Iranian market. Total sales last year dropped £7.5m to £48.5m, and profitablity was much reduced.

Lansing exports as much as two-thirds of output, and is the only British company to build up a significant presence in Europe; its share of the home market remains dominant. Production was quite severely affected last year, however, and it is likely that margins suffered on exports in particular.

Lansing has always been in the forefront of technological development, and it will need to maintain this reputation if it is to hold on to its position.

Eaton went through a lot of upheaval last year as the plan to switch most of the production of its German plant to the UK was effected. The plan suffered a setback because of industrial problems, including the engineering strike, and by the end of the year, a backlog of 400-500 trucks had built up. Eaton plans to build 3,000 to 3,500 trucks this year, of which about 35-40 per cent will be exported in addition to those models made in the UK for the German market.

Hyster, the other big multi-national, is building a new plant in Northern Ireland, which will be in addition to its Scottish factory. The plant will be highly automated, which will give Hyster the cost benefits that it needs to maintain its position as probably the most profitable of the American lift truck operations in Europe.

Caterpillar, meanwhile, has not yet managed a significant share in lift trucks, although few doubt that this will be achieved at some stage in the future.

LancerBoss, a privately-owned company, won a valuable order a couple of years back in Saudi Arabia for the equipment of port famlilties. The company announced last year that it would be expanding its production capacity. Sales increased by 20 per cent last year, but profitability was unchanged.

The British market is attractive, but very competitive. Companies such as Jungheinrich, Linde, Still, and Fiat have embarked on promotional campaigns designed to win for themselves at least a small slice of this market.

The Japanese share of the UK market is meanwhile variously estimated at 10-12 per cent (the industry itself is intensely secretive about its statistics with the result that estimates abound), but is expected to grow. The British companies, however, have enjoyed a strong position over the years and would be very foolish to let this slip out of their hands now.

H.D.

Italian manufacturers face growing uncertainties

WITH THE marked exception of industrial lift trucks, Italy's machine handling industry is facing growing uncertainties in view of the continuing slump in both the domestic and European consruction marets and the difficulties in keeping abreast with the technological advances of the sectors main international competitors, particularly in the U.S. and West Germany.

Indeed, the main problem of the industry in Italy has traditionally been a technological one.

"In the absence of a strong domestic market, Italian manufacturers have found it difficult to develop the sort of advanced technology required to remain competitive on the international market," a leading public sector machine handling expert explained.

"But the industry's problems have now been exacerbated by the failure of the Government to introduce its long- awaited and promised industrial reconversion and recovery programe, at a time when the domestic construction market faces a dire crisis."

Italy's machine handling industry, with an overall annual turnover of some L800bn and employing about 37,000 people, is largely concentrated in the country's northern industrial triangle and is made up of a large number of small and medium-sized companies.

While these small and medium-sized enterprises have traditionally enjoyed in Italy better labour relations and greater flexibility in their productive activities than the country's larger groups, they have found it hard to compete internationally in a sector which is becoming increasingly specialised and sophisticated.

In the case of the production of large industrial equipment, such as cranes for steel plants, ports and major industrial complexes, only the larger Italian enterprises, such as the state-controlled CMI group, or private concerns like Reggiane, Gentile e Brigli, and Ceretti e Tanfani have managed to keep up, and sometimes maintain a lead on their international competitors, in terms of technplogy. For example, the Genoa-based CMI group has become a major exporter of cranes for steel plants and is now specialising in sophisticated lifting equipment for nuclear plants.

World leaders

Another major Italian state group, Saipem, controlled by the National Oil Agency, Ente Nazionale Idrocarburi, has also built a deep-water pipe-laying vessel, the Castoro Six, which has been laying pipes at record depths in a sector of advanced technology in which Italy can claim to lead the world.

In general, however, Italian technology in this sector has lagged behind. This also came out in a Government report on the industry which criticised the excessive fragmentation of the sector with Italian companies often competing against themselves for international contracts.

In contrast with the sector as a whole, the lift truck industry has continued to flourish in Italy. Turnover, between 1978 and 1979, rose by nearly 32 per cent from L110bn to L145bn. Employment in the industry increased by 19 per cent. Fixed investments grew by 25 per cent from L7,000bn to L8,750bn.

Unlike other Italian machine handling sectors, lift truck manufacturing enterprises tend to be more concentrated in the south and less industrialised part of the country.

Fiat, the giant Turin-based motor group and Italy's largest private enterprise whose car manufacturing activities have faced growing difficulties during the past six months, described its car lift trucks manufacturing company, Fiat Carrelli Elevatori, as "a nice little business."

The group, with a plant at Bari in the south, is currently doubling up its capacity to about 17,000 lift trucks a year by expanding its existing facilities.

Although modest by Fiat standards, the truck lift concern has remained profitable and was recently turned into an independent company in the framework of Fiat's ambitious group reorganisation programme. About a third of its output is supplied to other Fiat plants, while the balance is shared between exports and sales on the domestic market.

However, the majority of Italian lift truck concerns consist of small to medium-sized private companies which have had to rely on their own devices to expand and secure growing shares of the domestic and international markets. One example, which illustrates both how these companies have grown and continue to maintain their competitiveness, is the Fiori concern in Modena, in central Italy, where it produces dumpers and lift-trucks, particularly for airport-handling use.

It was started by Sig. Fioravanti Malavolta, who began his working life at the age of 15 as a mechanic and subsequently took a job with Fiat Trattori, the tractor manufacturing plant in Modena of the Turin motor group. After the war, he set up his own tractor repairs business, which started flourishing when he decided to convert former army Jeeps and trucks into industrial vehicles, such as mini-mixers and small dumpers.

In 1948, he opened a small workshop, employed ten people and started producing one dumper a day. Now, the Fiori concern sells more than 1,200 dumpers a year to more than 50 countries all over the world. As a measure of the small company's enterprise, it has been working on the production of an unusual mechanical device to shake olives off trees.

Paul Betts

The application of a fork truck is not limited to the stacking of pallets: this unit, a four-tonne diesel R-34 series truck by Still, is carrying a helicopter to a maintenance shop

French producers' winning strategy

THE SECRET of success in world markets, it is often argued, is specialisation. Whether this is true or not in a general sense, the French fork-lift truck industry has shown how this principle can be put into effect by developing two of the world's leading manufacturers of rough-terrain vehicles. These two, Manitou and Sambron, are calculated by some competitors to have between 50 and 70 per cent of the European market in their specialised sector.

Rough-terrain fork-lift trucks are designed to do lifting jobs in areas where there is a premium on rugged durability — on building sites, in saw mills, in outdoor stores and on farms. They combine some of the characteristics of a tractor with those of a fork lift, and have to be able to work in difficult conditions.

The French producers have come on to the scene in a big way since the last war and have, it seems, succeeded because they have been willing to push resources into this sector just as much overseas as at home.

The bigger of the two companies is Manitou, a subsidiary of the Braud et Faucheux group which also makes a range of other building site products (dump trucks and concrete mixers), and distributes Toyota fork lift trucks for the Japanese company in France.

Recently, the Toyota business has been expanding, but it is reckoned that over two thirds of Braud et Faucheux's 1978 sales of FFr 405m ($96.4m) were in the Manitou rough terrain products. Net profits amounted to FFr 22m.

Sambron, which has recently taken over about half of the Richier construction equipment company from Ford, also makes dump trucks. But, again, its forte is in rough terrain vehicles. In 1978 it achieved a turnover of FFr 167m and had profits of FFr 1m.

Between them, these two companies have put France on the map among the international fork lift truck manufacturers, simply by pushing their speciality products.

In other aspects of the industry, France has been nowhere near as successful, and has certainly not developed on the international scale which is now becoming an essential element of the business. But, in the last two years or so, the home producers have been helped to take a grip on the domestic market and consolidate their position by new regulations which have had the effect of reducing competition from overseas.

These "protective" measures, strongly condemned by France's partners, mean that industrial trucks sold in France have to have removable fuel tanks and similar controls to those of a car. Both of these new rules are based on safety considerations, and have been brought into the forum of proposed EEC regulations. But whether or not they become generalised, the regulations have had the effect of making it more difficult to export to France.

Acute problems

These problems have been particularly acute for smaller manufacturers whose limited production and financial margins cannot support the cost of extensive production modifications. Larger companies from Germany, the UK and Italy — including the European arms of the big American and Japanese multinationals — are now overcoming the difficulties: they, in any case, are planning ahead for the harmonisation of European standards. But there is evidence that some smaller producers have given up the French market altogether.

Following these new protective measures in France, the industry has been running a strong balance of payments surplus in the last two years.

Terry Dodsworth

Vigorous German truck market

THE WEST GERMAN market for industrial trucks is the largest in Europe, and has given rise to an industry which is particularly vigorous and competitive. The market last year has been estimated at around 30,000 trucks, of which about one-third is imported.

Even with a market of this size, it is clear that the capacity of the industry far exceeds the size of the home market. The three biggest manufacturers, for example, have enough capacity between them to satisfy the German market. To these must be added the smaller companies, and the multinationals, of which Clark Equipment is the most important, plus imports. The surplus production must therefore be exported, and many companies in the industry manage to sell more than half their output overseas.

The Linde group, which also includes Still in Germany and Baker in the U.S., is the largest domestic manufacturer. The two German companies, however, operate quite independently in marketing and servicing. Linde has concentrated mostly on internal combustion (IC) trucks, while Still specialises more in electric trucks. The German market already splits quite heavily in favour of electric trucks, and demand is tending increasingly in this direction.

Linde's main factory is at Aschaffenburg, where it has recently added three more production lines to bring it up to a capacity of 12,500 trucks annually.

Linde's 1979 total sales at £503m were 19 per cent up on the previous year. Materials handling accounts for 34 per cent of turnover, other parts of the group being concerned with various types of engineering such as refrigeration and machine tools. In the current year, Linde plans to produce 10,500 units, and says it has already received orders for 8,500. This compares with sales of just over 7,000 units in 1979, of which 52 per cent were exported.

Lift truck management is incurably optimistic about the market share that they claim. Linde claims around 30 per cent of the German market, and would be followed closely by Still.

Based in Hamburg, Still was acquired by Linde a few years ago after going through a difficult period. Although production and marketing of the two companies has remained separate, there are now moves to rationalise some component production and this should bring some cost advantages to both companies.

Like other German manufacturers, Still has developed its export business fairly successfully in the past few years. It has started marketing in the UK over the past year, and launched a new truck with the market particularly in mind. The British market, although well catered for by domestic manufacturers, has become increasingly attractive to the German industry since the stronger pound has made their prices more competitive in the UK.

Despite the expressed optimism of all the manufacturers, however, there must be real doubts about their expansion forecasts in the current year. Exports are not just topping-up for the industry, but a vital part of the operation.

Even if the German market holds up better this year than most, it remains to be seen how well the German industry will be able to sell its trucks overseas. Many of these markets expect companies to cut back on investment, and lift trucks will take their share. Export margins, meanwhile, will be difficult to maintain even at present levels.

Clark Equipment, the U.S.-owned group which is the world leader in industrial trucks, basis its European manufacturing operations in Germany. Clark's sales of trucks are in excess of $500m, with Europe the second biggest market after the U.S.

Capacity at its Mulheim factory has been increased recently, and the company will obviously hope to take advantage of the weakening position of certain European manufacturers over the next couple of years. In terms of units, unofficial estimates put Clark as having between eight and 10 per cent of the European market, which would amount to 7,500 to 8,000 trucks.

In Germany, its market share probably runs a close third to Linde and Still, but its decision to cease production in the UK a few years ago has cost it market share in that country. Eaton stopped just short of the Clark solution in reverse. Instead of closing down its German factory and shifting all production to the UK, it decided, a couple of years ago, to continue manufacturing a few products for the German market only from its factory at Velbert.

The size of the operation has been scaled down substantially, but Eaton hopes to regain some of the sales it lost in Germany in the late 1970s.

The third major domestic manufacturer is Jungheinrich, which makes only electric trucks. Sales in 1979 equalled around £130m, of which 10 per cent was accounted for by stackers. The Jungheinrich range includes pallet trucks, lift trucks, as well as reach trucks. Production last year was in the order of 12,000 units, of which 58 per cent was exported. In the current year, the company is planning a 10 per cent expansion.

The industrial truck industry will succeed only if it can adapt to the changing requirements of its customers. The German industry has tended to anticipate trends more successfully than others, while maintaining the reputation of producing well-engineered trucks.

In addition, the leading companies have worked hard at building up their distribution networks, with the result that they have at least a foothold in most developed markets. But it would be surprising if the next year or two does not knock some of the expansion targets, in common with the industry elsewhere in the world.

Hazel Duffy

Lean times for crane industry

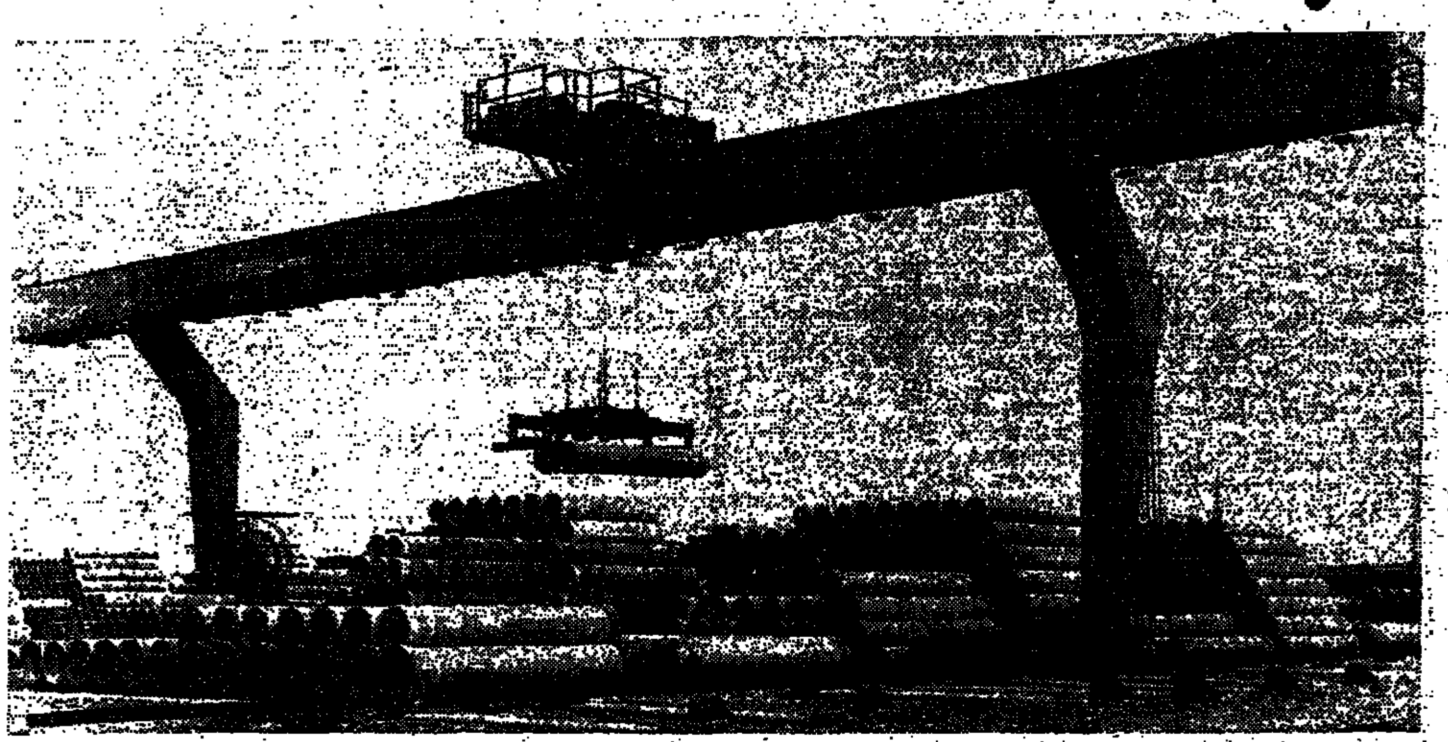
THE PRESENT state of the crane industry — which, in this context, excludes mobile cranes used in construction and civil engineering — exhibits in an extreme form the difficulties facing virtually all British manufacturers of capital goods.

The home market has been flat for some time and seems likely to become worse. Overseas some of the more important markets, especially in the Middle East, have become less active. There are fewer big contracts to go for; and currency movements have made it intensely difficult for British firms to compete on price against the Germans and the Japanese.

For the same reason the UK market has become more vulnerable to import competition, especially in hoists and crane components. Finally, there is the general problem of inflation, which makes it hard even for the profitable companies to generate adequate funds to support investment in new products and new machinery.

The dearth of orders within the UK applies especially to heavy cranes where the big customers tend to be State-owned enterprises — such as British Steel, British Shipbuilders, and the Central Electricity Generating Board. Their investment programmes have been small and, with the possible exception of plans for new nuclear power station (which are still some time away), seem likely to stay that way.

"I'm assuming zero growth in the domestic market over the next five years," says one senior executive in the industry. Another says: "I don't see a significant recovery in steelworks and dockside cranes in my lifetime."



A Carruthers Monobox crane (capacity, 7½ tons; span, 118 ft) carrying asbestos cement pipes at a stockyard in Widnes

Strong emphasis

In the past five years several companies have put greater emphasis on exports; and some big orders have been won; perhaps the most spectacular was the £15m Saudi Arabian contract for dockside cranes won by Stothert and Pitt, of Bath, in 1973. But in the past 12 months or so export business has been hard to come by.

When sterling was in the region of $1.80, British crane makers could compete very effectively on price against their main overseas rivals. Now the situation is reversed, while the continuing high level of inflation in the UK makes bidding for fixed price contracts even more risky than normal. Companies which have traditionally been exporting about 40 per cent of their output are finding it difficult to maintain an export ratio much higher than 20-25 per cent.

As for imports into the UK, the situation is best illustrated by the example of wire rope hoists, which are a key element in an industrial crane, representing around 25 per cent by value of the total product. This has long been a sector in which the British industry is relatively weak. There are several companies which make wire rope hoists, both for use in their own cranes and for sale to other crane producers—they include Clayton Crane and Hoist (a subsidiary of Porter Chadburn) and Herbert Morris, the Davy Corporation subsidiary, which is the market leader in general industrial cranes. But they lack the volume of production which is enjoyed by the major Continental hoist producers.

The biggest of these is Mannesmann Demag of Germany, which both imports equipment into the UK and manufactures cranes and other materials handling products at its factory in Banbury. Other important hoist producers include SWF of Germany (a subsidiary of the GHH group), Verlinde of France and Kone of Finland; the Japanese are active in the market. There is also strong import competition in the lighter electric chain hoists; Balkancar of Bulgaria is among the leading foreign suppliers in this sector.

The attempt to roll back the tide of import competition — which has been an objective for the industry for at least ten years — has been greatly hampered by currency changes. This is not to say that the British hoist makers are giving up — on the contrary, they are seeking to compete more effectively with new designs and better marketing. But the effect of rising imports of hoists and other equipment, in a market which is already oversupplied, is to depress margins still further. Some companies are said to be "buying" orders at unrealistic prices, hoping to recoup their profits out of the subsequent spares business.

Capacity cut

How is the industry reacting to all these problems? Inevitably, there has been some reduction in capacity, especially at the heavy end, and this will probably continue. Whether it will involve any further changes in the structure of the industry seems doubtful.

Over the past decade there have been two sorts of amalgamation within the industry—one involving the bringing together of several crane companies under a single ownership and the other the acquisition of crane companies by large industrial groups.

Examples of the first type are NEI Clarke Chapman Cranes and the grouping of Adamson Butterley, John Smith of Keighley and Butters Cranes in the Norcros stable. Examples of the second are the acquisition of Herbert Morris by Davy Corporation and of J. H. Carruthers by Burmah Oil.

Other leading crane makers include Matterson (a subsidiary of Williams Hudson), Street Crane (a private company) and, the specialist in dockside cranes, Stothert and Pitt.

There are, of course, a good many engineering and structural steel companies which make cranes from time to time as a way of filling their capacity. There are also the so-called railway arch companies which may put together a few light cranes from bought-in components. These two sectors, though they account for a small share of the market, contribute to the over-capacity in the industry.

In present conditions it seems unlikely that any of the established manufacturers, whether independents or members of large groups, will wish to add to their crane-making capacity by buying other crane companies. Indeed, the most striking feature of the last few years has been the determination of several of the principal companies to diversify their product range, both within the materials handling field and outside it.

Separate articles on NEI Clarke Chapman Cranes and J. H. Carruthers (see facing page) indicate the directions of diversification; the tendency is for these companies, while not neglecting the opportunities which still exist in their traditional field of expertise, to look for other products, sometimes through licensing deals, which suit their manufacturing facilities. Another article (on the facing page) looks at opportunities in offshore platforms, where Stothert and Pitt has been particularly successful.

The demand for cranes is not about to disappear—it remains a substantial part of the mechanical engineering industry. But at least for the next few years, growth for individual companies will come only through increasing market share, or by finding niches in the market which are either under-supplied or show above-average prospects for expansion.

Careful study

Such a strategy requires very careful study of the market and a willingness to spend money on product development. Dramatic technical breakthroughs in cranes are improbable, but there is always scope for improving quality and performance through design improvements and greater manufacturing efficiency.

The fact that several of the leading companies are backed by the resources of larger groups should help them ride out the present lean times—although the specialists argue that they are quicker on their feet to take advantage of market opportunities. The challenge for both groups is to keep their organisations healthy during one of the most difficult periods the crane industry has experienced.

Geoffrey Owen

Emphasis on greater safety

THE LIFT truck is a particularly versatile piece of mechanical handling equipment but, perhaps because of its versatility, it has a poor safety record in the factory and warehouse.

This year about 5.000 people will be injured and another 20 will be killed in factory accidents involving lift trucks. Many more will be injured or die as a result of accidents involving other forms of mechanical handling equipment.

Lift trucks are responsible for about one third of all injuries involving transport in the factory. In almost half of these accidents, injuries are caused wholly or partly by driver error.

Operators are too frequently ignorant of the regulations and principles of lifting resulting in accidents during the lifting, stacking and lowering processes.

In 1976—the last year for which full statistics are available in the UK—fork lift trucks were directly responsible for some 30 deaths in factories and other 5,100 accidents. In warehouses and on the docks, a further five people were killed in more than 400 accidents.

Key factors

Responsibility under safety legislation for minimising the risks in the use of all equipment in factory plant and during other processes is shared by both management and the workforce. The safety of employees in areas where lift trucks operate depends upon such factors as safe systems of work, adequately trained operators, well-maintained trucks of safe design and manufacture, a suitable environment—such as smooth and level floors, and the control and segregation as far as is possible of pedestrians and trucks.

It is perhaps not surprising, given the accident record of the lift truck, that in the UK the Health and Safety Executive—the body mainly responsible for monitoring and enforcing health and safety legislation—has highlighted the risks involved in the use and misuse of the lift truck in a series of guidance booklets, training films and reports.

In December, the executive published a guidance booklet on lift trucks aimed at pinpointing the risks and advising how accidents could be avoided.

The executive warned that despite their versatility in the movement of raw materials and goods in many industries and processes the increasing use of lift trucks in factories, warehouses, agriculture and on construction sites could result in even more accidents unless preventive action is taken.

The booklet underlined the need for companies to ensure that operators are properly trained to meet the particular conditions of work and that supervisors see they continue to operate trucks carefully. The need for such training and supervision becomes clear when one considers that virtually anyone, of any age or temperament can be put in charge of a vehicle weighing up to eight tons and costing up to £25.000.

In recent reports, the executive has pointed out some of more dangerous misuses of fork lift trucks—for example, using the truck without adaptation as a working platform. In many accidents of this sort men have been straddling the forks or standing on loose pallets. Specific attachments con convert the fork-lift truck into a safe temporary lifting platform and for more regular use many types of lifting gear—including scis-? sor and access lifting equipment are available.

There are, however, many other reasons for lift truck accidents including inadequate premises and poor truck maintenance. Some of these factors have been highlighted in accident case studies published by the Executive in previous reports.

Accident No. 1.

A fork-lift truck rental company supplied a truck to a factory which, unknown to the hirers, had a defective braking system. Shortly afterwards, it was being driven down a ramp when the brakes failed, sending the truck out of control. The truck crashed into a column injuring one of the driver's legs which subsequently had to be amputated.

The executive has stressed the need for industry to adopt proper systems of work including training, to control traffic and pedestrian movements and to maintain trucks in good working order. Some accidents in which people have been crushed between the framework of the cab or canopy and the ground suggest that further modifications could be made to truck design to improve safety.

The adaptation of equipment design to improve safety has been demonstrated outside of the factory floor. In quarrying and opencast coal mining one of the major hazards is accidents involving vehicles. In 1978, in the UK, six of the nine deaths in open-cast coal mining involved haulage and transport and a major factor was the size of dump trucks and poor driver visibility. Cab viewing aids, such as closed-circuit television, are now being developed to ease this problem.

Demonstration

To improve maintenance procedures some larger companies now use insurance companies to carry out periodic equipment inspections. Such inspections are particularly essential for cranes and other forms of lifting equipment.

Safety legislation in many countries now requires that—aside from periodic maintenance—cranes must be clearly marked with the maximum safe lifting load and must be operated in such a way to minimise risks. Many serious crane accidents, though seemingly the fault of the driver, are more likely to stem from fundamental failures in management safety organisation.

In March, the Health and Safety Executive published a report on management's responsibilities in the safe operation of mobile cranes which—through three case studies—illustrated the special dangers of mobile crane work including the lifting of heavy eccentric loads, the problems of tandem lifting and the transport of large cranes.

The report highlighted the dangers involved in using equipment which is now capable of lifting more than 500 tonnes and which can include jibs higher than a 20 storey-building and pinpointed four specific management responsibilities:

- The need to identify those responsible for the selection of cranes for a particular operation—and the factors to be considered before the choice of equipment is made.
- The need to consider and assess site conditions before operations start.
- The need for careful training and instruction of drivers together with proper supervision.
- The need for detailed servicing and maintenance schedules particularly when the crane is on site.

Although the Executive's intentions have focused so far on the safety aspects of lift trucks and cranes, other mechanical handling equipment is now under scrutiny. In particular, the Executive is preparing a guidance note on the operation of conveyors.

The recent extension of safety legislation in the UK into the "new entrant sectors"—areas such as schools, universities, hospitals and waterworks—together with the introduction of statutory shop-floor safety representatives, is likely to intensify the pressure for more stringent safety checks.

More pressure

As far as the manufacturers of mechanical handling equipment are concerned, this may result in further pressure for improved safety standards and changes in equipment design. Inevitably this will lead to added costs and could further weaken the competitive position of manufacturers subject to already stringent safety controls throughout the manufacturing process.

European manufacturers, together with those in the U.S., already complain that in some markets national safety legislation can be used as a trade barrier and that in other markets buyers' concern over price rather than safety design features and quality can aid competitors.

It therefore appears inevitable that the pressure for the standardisation of international safety legislation will increase. Both the safety bodies and the manufacturers in countries where strict safety standards already exist are concerned that any process of rationalisation of safety standards should be upwards—rather than simply a levelling-out exercise.

Paul Taylor

Despite the difficulties being faced by the UK crane industry, some manufacturers are finding new ways of diversifying and increasing their productivity, as GEOFFREY OWEN reports in the following profiles.

Mood of optimism

MR. J. ROGER BAKER is not optimistic about the short and medium-term future of the heavy crane business, but he is optimistic about the future of NEI Clarke Chapman Cranes—which happens to be the UK's largest heavy crane manufacturer and of which Mr. Baker is managing director.

The apparent paradox reflects the company's determination to offset the static or declining market for cranes with other engineering products which suit the skills and facilities of its six manufacturing units. The success of this policy is illustrated in the company's performance in 1979, when traditional products accounted for only 40 per cent of total sales.

The company, which now has 2,300 employees, stems from the amalgamation in the late 1960s of three companies—Clyde Crane and Booth, Wellman Cranes and Sir William Arrol—which represented a large part of the UK's heavy crane industry. The merger was followed by a rationalisation of products and plants, so that each unit could concentrate on the machines for which it was best suited; duplication in design work was cut out.

More recently, the company has moved into a different sector of the crane business by buying Thomas Smith of Rodley, makers of draglines and crawler-mounted cranes. Its plant is adjacent to that of Clyde Booth and there is scope for rationalisation between the two factories.

The heavy crane industry was certainly too fragmented in the 1960s and in that respect the mergers achieved their purpose. But what no-one anticipated at that time was the precipitate fall in demand, especially in the UK.

Hence, in the last few years Mr. Baker and his colleagues have been bending every effort to find new products which would maintain throughput and employment in the factories. He has had to persuade potential licensors of the advantages of having their products made in the UK, and of Clarke Chapman Cranes' ability to achieve the desired standards of quality and cost.

So far, the results look promising. Wellman Cranes, for example, is manufacturing two large power presses for BL Cars under an agreement with USI Clearing of Chicago; another machine will be going to Canada. There is an agreement with the Oilwell Division of United States Steel Corporation for the manufacture of drilling equipment; at the end of last year a £4.7m order was obtained, which will be shared between Wellman Cranes at Darlaston and Clyde Booth at Rodley. Under an agreement with Zokor of the U.S., a big tunnelling machine for a French power station is being made at Wellman.

Nearer to the traditional business, John Boyd at Annan is making 10 rubber-tyred container cranes for Felixstowe, under license from Paceco of California.

Mr. Baker is not deserting the crane industry — he is fighting hard for any business that is going. Recent orders include a big ladle crane for the Port Talbot continuous casting plant and three unloaders for the Castle Peak power station in Hong Kong. But one of the attractions of the licensing agrements, apart from the work they provide to the factories, is that they free the company's crane designers to concentrate on the crane market.

The company has itself licensed several overseas crane manufacturers and is looking for more. New types of crane have been designed to meet the particular safety requirements of PWR (pressurised water reactor) nuclear power stations; design contracts have been won in the U.S. and the UK.

Moreover, there is scope for developing crane-related products in-house, such as gearboxes, hydraulic equipment and grabs, which can be sold to other manufacturers as well as used in the company's own machines.

"It has been a difficult two years," says Mr. Baker, "and the crane market is still going down." But he is full of praise for the way his employees have got to grips with the non-traditional products and the changes which are involved. The aim is to maintain the company's strong position in cranes while ensuring that at least 50 per cent of capacity is filled by products outside the crane field.

Mr. J. Roger Baker, managing director of NEI Clarke Chapman Cranes—Britain's largest manufacturer of heavy cranes. The company is successfully diversifying its engineering production to offset the static market for cranes

Diversity of products

MR. PATRICK McTIGHE, group managing director of Herbert Morris, joined the company as marketing director in 1970. It was a time when a new management was beginning to steer this old-established company in new directions: the original Herbert Morris started importing German pulley blocks in 1884 and began manufacture at Loughborough, its present site, in 1897.

"We looked carefully and systematically at the market," says Mr. McTighe, "and we tried to draw some conclusions from it." This led, for example, to a new emphasis on the servicing, inspection and testing of cranes through a separate subsidiary, Crane Aid Services, recently strengthened by the acquisition of Lloyds British Testing. "It was one area of a slow-moving capital goods market where demand was growing rapidly," he says.

Similarly, Herbert Morris revised its marketing arrangements at the low-cost end of the market, switching the sale of pulley blocks, electric chain hoists and similar items from direct selling to a network of distributors.

Mr. Patrick McTighe, the group managing director of Herbert Morris. One of the company's strengths has always been its wide range of industrial cranes. In recent years, this range has been extended

One of Herbert Morris' strengths has always been its wide range of industrial cranes. In recent years, the range has been extended, partly through internal product development, partly through co-operation with other companies. There is co-operation with MAN of West Germany on large steelworks cranes. A new design of ship-to-shore crane has been developed: three 40-ton sliding boom cranes were installed at Seatrain Docks, New Jersey, and recently a new self-erecting "Samba" with 115 ft outreach was built for Sea Container Services.

Morris developed the "crane kit" concept whereby the more specialised components and the expertise are supplied from the UK, but the crane itself is manufactured locally. On major capital projects, Morris formed links with other British manufacturers in order to secure the necessary financial strength to bid for this type of business—a big contract in South Korea was won on this basis.

In the early 1970s, Herbert Morris was the target of more bids and counter-bids than most companies have to endure. The management fought hard to retain its independence but in the end settled for an agreed merger with Davy Corporation, the leading UK-based engineering contractor.

The link with Davy provides advantages both in financial resources and in marketing terms, though the spin-off in direct orders is not significant in Morris' total business. In any case, during the past year or so fewer big projects of the type which Davy competes for have been available; the competition in the whole capital goods field has been extraordinarily fierce.

As with other crane makers, Herbert Morris has been hit by the dearth of domestic orders from steelworks, shipyards and power stations. A factory in Manchester, making heavy cranes, was closed — "We have got to raise our productivity and match up the company to the size of the market," says Mr. McTighe.

The company has close links with Loughborough University — "We are always looking for ways of enriching the mix of ideas about product development," says Mr. McTighe. The company has invested in computer-aided design, in numerically-controlled machine tools and in other ways of boosting productivity.

But inevitably the weak home market, the difficult competitive situation overseas and, above all, the continuing high level of inflation make it difficult to generate funds on the sort of scale which Mr. McTighe would regard as satisfactory.

Change of direction

MR. DAVID PERCY, who is 46, spent 12 years with Ferranti, managed the British subsidiary of Oerlikon Buhrle of Switzerland and later ran his own machine tool business. Last year, he became managing director of J. H. Carruthers, an old-established crane company based in East Kilbride. Founded in 1887, it was privately owned until 1973 when it was acquired by Burmah Oil; it is now a member of the Burmah Engineering Group.

Mr. Percy sees his task as that of giving a new sense of strategic direction to the company, including a stronger position in overseas markets and a greater emphasis on non-crane products. With the revival in Burmah's fortunes, funds are available for productt development and for new investment in machine tools.

Like Mr. Baker at NEI Clarke Chapman Cranes, Mr. Percy regards the big East Kilbride works, with its 300 employees, as a heavy engineering facility capable of producing other items besides cranes.

Several lines of diversification are being pursued. Two licensing agreements have recently been concluded which should bring additional orders to the factory. During the next few years Mr. Percy plans to build up the non-crane side to account for at least 25 per cent of turnover.

Carruthers has a good technical reputation — in 1969 it won the Queen's Award for technological innovation for its Monobox crane design concept — and Mr. Percy intends to build on this in the development of overseas business. The link with Burmah makes it easier to establish a presence overseas and four key territories have been selected for concentrated sales attention. Satellite manufacturing units are being established in overseas countries, with the design, expertise and certain components being supplied from the UK and the cranes manufactured locally.

Meanwhile, Carruthers is widening its range of cranes, especially at the lighter end of the market. In April, the company introduced the Unibox crane, with a lifting capacity of up to 15 tonnes, which it claims, will cost up to 20 per cent less than comparable units. The design is based on standard components to suit any shape of portal roof. Mr. Percy describes it as the first in Carruthers's new generation of cranes — "the most significant electric overhead travelling crane development since we launched the Monobox girder crane in the 1960s."

Order intake in the first quarter of the year was substantially up on the same period of 1979 and most of the new business was for Carruthers's traditional products. But Mr. Percy hopes that as the non-crane side is developed he can make better use of the large facilities which he has available and achieve a satisfactory return on the new investment which Burmah is now making in the business.

Mr. David Percy who last year became managing director of J. H. Carruthers, the long-established crane company, based in East Kilbride. It is now a member of the Burmah Engineering Group

UK companies succeed in North Sea projects

IN THE early years of North Sea oil and gas development, operators of offshore platforms tended to use American-designed and often American-built equipment, since U.S. companies had the most experienc of this business. This certainly applied to the cranes, which are needed to transfer equipment from supply vessels on to the platform itself.

But two factors gave British crane-builders an opportunity to break into the market. One was the fact that North Sea conditions were more arduous than those for which some of the existing cranes were designed; as safety standards were increased, new designs were needed. The second was th strong political pressure on the oil companies to buy British equipment whenever possible.

One of the British companies which took advantage of the opportunity was Stothert and Pitt of Bath. This company has had long experience of marine work, especially in dockside cranes and cargo handling, deck cranes, and it has particular strength in jib crane technology for heavy lifts. With its traditional business tending to decline, North Sea platforms offered a natural avenue for diversification. The hazardous conditions and stringent safety requirements put a premium on high-quality engineering.

Offshore platforms

Since 1973, the company has been supplying its OS series of pedestal-mounted cranes for offshore platforms; they have been ordered for a number of North Sea installations, including the Ninian Central, Southern and Northern units. An additional safety feature which can be fitted to these cranes is what is called "ultimate protection," a system developed in conjunction with Humphreys and Glasgow. It is a sophisticated package of equipment, designed to minimise the risk arising from overloading. Features of this kind make it possible for cranes to be operated even in severe weather conditions.

Another company which has done well in the North Sea is Priestman Brothers, an Acrow company. Well-known for its crawler and wheel-mounted cranes and excavators, Priestman used its experience of hydraulic control systems, slew rings and other key components to develop the Sealion range of pedestal-mounted cranes for offshore platforms. The first order, for a 30-ton crane, was placed by Conoco in 1974. Since then, the range has been extended up to 100 tons and other customers include British Petroleum, Union Oil, Amoco and Shell.

There may be scope for these companies to build on their North Sea experience and compete for orders in other parts of the world, especially as most of the same oil companies are involved and the task of obtaining all the necessary official approvals has been completed. There are, however, not many areas where conditions are exactly comparable to the North Sea: the establishment of customer service arrangements on an international basis would represent a sizeable investment.

G.O.

Success for Japanese manufacturers

ONE SURE sign that a Japanese industry has achieved success is when the industries in other countries (having failed to make even the slightest dent in a lucrative Japanese market for their products) begin suggesting protectionist measures to limit imports. By that measure, Japan's mechanical handling industry (centred on forklift trucks) is doing very well indeed.

Forklift trucks were unknown in Japan until after World War Two, when the occupation forces introduced them for the first time. The initial response to the labour-saving vehicles is said to have been negative on the part of companies loathe to upset workers by replacing them with machines.

Remarkably, however, the Japanese market dominated by three companies, is now the second largest single national market in the world (55,000 units in 1979 compared with 90,000 in the U.S. and 78,000 units for all of Europe). Moreover, the Japanese share of the Western industrial forklift market has risen to about one third the total demand.

Last year, forklift production (93,000 units) in Japan was worth Y150bn (£288m), more than triple the value of ten years earlier. The total value of all industrial vehicles in 1979 reached Y352bn (£677m) compared with Y108bn (£207m at present exchange rates), in 1969.

The Japanese success in exporting forklift (roughly 40 per cent of all sales) has made imports into Europe a lively topic of discussion at recent bilateral private level meetings.

Although definite moves to restrict imports have not been taken, the share of the market the Japanese are taking now is even making the Japanese uneasy about their success.

A further irritant on the trade side, and one which is common in other industries, is that neither the Europeans (who take 31 per cent of Japanese forklift exports) nor the Americans (35 per cent) have shown any obvious signs of penetrating the large Japanese market. Foreigners are, in striking contrast to Japanese enthusiasm for overseas markets, glaringly absent from Japanese industrial fairs. Total forklift imports, according to Japanese companies, could be counted on one hand.

The Japanese further argue that they have encouraged the Europeans to look more closely at their market, and claim there are no obvious tariff or non-tariff barriers to keep the foreigners out.

These claims may on the surface be true. The fact is, however, that any European producer trying to penetrate the Japanese forklift market at this stage must contend with powerful competition. The two leading forklift makers in Japan, Toyota Automatic Loom Works (a 35 per cent share of Japanese production) and Komatsu Forklift (25 per cent of the 93,000 units made last year) are both part of very powerful industrial groupings.

Toyota is the nominal parent of Toyota Motor, the biggest motor company, while Komatsu is a subsidiary of the biggest construction machinery producer in Japan, bearing the same name.

The third largest industrial vehicle maker is Toyo Umpanki, which has a 10 per cent share (but exports a greater percentage of its forklift production than the big two), followed by about five other companies with minor shares.

Toyoda Automatic Loom, which, as its name suggests, started as a textile machinery company in 1926, did not begin to produce forklifts until 1956. It has, however, leaped ahead of its competitors in part because of the resources it can draw on in other sectors of the Toyota group. Its exports are handled by the group's giant sales company, engines and components are produced by other affiliates.

Toyoda also has what it claims to be the largest single forklift plant in the world, capable of turning out 35,000 units a year, opened in 1970. Hungary's Balkan company says it has a 60,000-unit capacity plant, but Toyoda strongly doubts this reflects actual production levels there.

The second major company, Komatsu Forklift, had its start as a post-war producer of parts for the Komatsu parent, coming under the wing of the Komatsu group by the time it produced its first forklift in 1952. The company has set an ambitious goal of more than doubling its sales (expected to total Yen 49bn) by 1983, increasing its production of forklifts to 38,000 units from 24,000 units last year, and continuing to lead the rest of the industry (worldwide) in introducing new technology for materials handling systems.

The most striking feature of the company is its advance into the field of unmanned (computer controlled) forklifts which are integrated into automated handling systems. Developed initially four years ago for use in plants where workers cannot operate, such as nuclear power, chemical and deep-freeze facilities, Komatsu's management figures these systems will represent some 10 per cent of sales by 1983 (the end of a five-year development plan).

Komatsu has so far installed about 20 such systems, one in Europe. They are expensive (around Y100m on average, because they must be custom-tailored for individual customers. But interest in the technology, on which the company holds patents in the U.S. and Europe, is growing. At least one major British chemical company is known to be studying purchase of the unmanned forklifts system.

Komatsu also appears to be the most advanced company in applying electronic technology to more standard forklifts, having recently introduced a machine which uses a microcomputer to replace the traditional mechanical levers to control the lift more accurately (making possible the use of less-skilled operators).

The greatest threat to the Japanese industry appears to be the possibility that protectionist pressure will actually build in Europe, where the various national industries tend to divide the market and thus inhibit the emergence of companies which can match the resources of the Japanese.

The Japanese, however, are clearly worried that once again their "success" could lead to trade problems putting a drag on what has otherwise been a thoroughly "uplifting" performance.

Richard Hanson

Stagnation in U.S. market

THIS YEAR looks certain to be tough for the U.S. manufacturers of lift trucks, squeezed between the twin pressures of a cyclical downturn in demand and increased competitiveness in an industry which seems in most respects mature.

The leading companies, Clark Equipment (with an estimated 27 per cent of the U.S. market), Hyster (20 per cent), Eaton Corporation (20 per cent) and Caterpillar Tractor (15 per cent), were pleasantly surprised by the maintenance of steady demand in the final quarter of last year, as the U.S. economy refused to tip into recession.

For Clark, that trend was sustained into the first two months of this year, partly because customers were building stocks ahead of a possible labour pay dispute. But by March, demand was dropping fast enough to produce a first quarter earnings decline at Clark, which reported profits of $21m on sales of $461m, compared with $28m on sales of $414m in the first quarter of the year before.

According to the Materials Handling Institute, shipments of all material handling equipment (of which lift trucks comprise less than half) were up by only 8 per cent in dollar value, to $1.2bn in the first quarer. Also, by January, shipments had begun to exceed the rate of intake of new orders. Eatons is forecasting a 16 per cent decline in lift truck industry sales in North America this year, to 84,000 units.

But more worrying to the industry than these cyclical patterns is the fact that the peak in the cycle in 1979, at 109,000 units, was only slightly higher than the previous cyclial peak of 103,000 units in 1973.

In other words, an industry which used to count on an average 4 per cent a year growth, appears to have stagnated. According to Mr. Alex Blanton, an analyst who follows the industry for Merrill Lynch, capital spending in U.S. industry in the period between the two peaks concentrated more on making the greatest use of existing floorspace and facilities than on building new plant. It will take a sharp increase in new plant commissioning to create growth in the industry, he feels.

The companies themselves, however, appear to have prepared quite well for the pressures they now face. Clark enters the current recession without several troublesome diversified operations which it still had on board in 1974-75. Its debt burden is much lighter and last year it turned in a commendable 18.4 per cent return on equity. Clark is now reaping the rewards of large new cost-efficient plants in Kentucky and West Germany. Hysster's return on equity, meanwhile, has topped 26 per cent, after a cost-cutting programme in the U.S. which involved reducing the size of the middle management corps by about a third and a successful marketing campaign around a streamlined product range. Strong performance in Europe, South America and Australia have also helped.

These figures are matched at Eaton and not within reach of Caterpillar or Allis Chalmers, although all three companies depend far less on lift trucks than Huyster and Clark (material handling gear comprises only 14 per cent of Eaton's business, for example).

In spite of that, along with Japanese competition (holding roughly one per cent of the U.S. market) one of this group, Caterpillar, has posed some of the harsher competitive questions in recent months as it has sought to expand its market share by a tenacious pricing policy, particularly in seeking large fleet sales.

The presence of such formidable names in the U.S. industry—Clark is the world leader—has not, however, prevented a worsening of the country's balnce of trade in material handling equipment since 1974. The growth of imports, at an annual average of 26 per cent, has been almost double the rate of growth in exports. The actual balance, however, remained favourable last year, with exports worth $825m aginst imports of $535m.

One reason for the relatively slow growth in exports is the attention the U.S. companies have paid to establishing and expanding plant overseas.

Another trend to which each of the manufacturers is seeking to respond is the market's growing preference for electrically-powered vehicles rather than petrol- or diesel-propelled units. Clark's Kentucky expansion, which will raise capacity by over half, is almost entirely concerned with increasing output of this type of machine.

Ian Hargreaves

New systems from Finland

IN THE current drive for cost-cutting in the consumer goods industry, goods handling and storage to-gether comprise an important opportunity that tends to be overlooked.

Kone Corporation, the Finnish multinational manufacturer of lifts, cranes and materials handling equipment, while had already produced conventional warehousing systems, foresaw a demand for more advanced solutions in this area.

It had long experience of the technology and know-how required. By hindsight, it seems natural that it moved all the necessary elements—crane, conveyor and electronics technology — under one roof, so to speak, some five years ago.

The then new Warehousing Systems Department of Kone Lift Group, was assigned the job of developing systems that would move the goods from the production plant into storage and on to the retailer (supermarket hotel, and so on), with minimal intermediate handling.

The department's current range of products comprises Rollax flow-through storage systems, conventional high-rise storage systems and Speed-O-Stack stacker cranes with automatic or manual control.

"Our systems are not for everyone," said Mr. Paavo Kotilainen, director of the department. "The warehousing system suits the need for a buffer storage between the producer and the consumer. At the same time, it provides sophisticated sorting possibilities for individual orders."

A typical client is a large brewery, and the Mallasjuoma warehousing system is perhaps the best way of illustrating the working principle. It was completed in 1979 and is claimed to be the first of its kind in Europe.

Mallasjuoma Oy is one of the biggest brewers and soft drinks producers in Finland. Its peak daily production at the Lahti factory is 80,000 crates of beverages (about 0.6m litres). Its new mechanised warehouse, built by Kone, has a storage capacity of 400,000 crates, 9.6m bottles. It is a high-rise storage working on the flow-through, first-in-first-out principle, important for perishable or semi-perishable goods.

Only two stacker cranes are needed for the entire warehouse, and they are computer-controlled. The crates are automatically loaded onto pallets which lock onto "buggies," (wheeled steel frames). The infeed stacker crane places these in the inclined (0.3 per cent) storage racks and they run down the racks by the combined force of gravity and a simple transfer system.

At the other end of the rack, the retriever stacker crane, acting on instructions from the computer, removes the pallets and loads them on retrieval lines. The pallets are then separated from their buggies and loaded into waiting containers which are trucked to distribution depots around the country. The computer not only gives the orders, it makes out the shipping documents.

Included in the system is automatic order selection which ensures that pallets are made up for onward dispatch according to individual client orders.

In other systems, the pallets are kept on their buggies and are quick-loaded into trucks. They are then, on arrival at the store, hotel, or other final destination, easy to move by inserting a simple lever device into the buggie. The Lahti warehouse is manned by one foreman, one warehouse charge hand and (to load the containers) two fork-lift drivers per shift. An additional two drivers look after local distribution needs. The traffic flow through the warehouse is 120 pallets per hour in and the same number out. The total investment cost was USD 2.5m, of which USD 750,000 was for the building.

Lance Keyworth

Double blow for conveyor market

BRITISH MANUFACTURERS of bulk conveyors, having been driven into export markets as a result of a fall in demand from former big customers such as British Steel, the Central Electricity Generating Board and the National Coal Board, are now suffering from the double impact of high inflation and a strong pound.

This has been particularly significant in competition with their major rival, West Germany, and others such as Japan. However, the longer term prospects for the world coal industry are providing some encouragement, although there are fears that British industry in general is not responding to this challenge as well as others, particularly Germany.

This applies mainly to the UK process plant companies which are very often the buyers of conveyor systems for plants built abroad. It is felt that the lead in this field being established by companies such as Lurgi, Krupp and others is putting German conveyor companies like Buhler-Miag in a strong position.

The industry is also aware of the likely need for high capacity continuous unloaders to take the place of the grab system as higher volumes of coal need to be transported around the world, a field in which Babcock-Moxey, a Babcock Contractors subsidiary, GEC Mechanical Handling and Simon Carves are active.

Although the continuous process unloader has been successfully developed for purposes such as handling grain, phosphates and coal, none has yet been built of high capacity to unload coal from large ocean carriers. Arguments persist that the grab method is more reliable, but the advent of the continuous machine has been delayed only by the recession in the world steel industry and the development of grabs with very high capacities. Few would argue that with large loads the continuous process can be faster and cheaper, but there are still fears about reliability of new machines.

The opportunities in this area are now widely recognised, since some estimates put the growth of seaborne trade in coal as 50 per cent up on current volume by 1985, and the company which sells the first acceptable continuous unloader will stand to profit considerably.

An indication of the overall importance of export markets to the UK industry is provided by Babcock-Moxey, which in 1975 sold around 95 per cent of its products in the UK, but now exports most of its output. Up until that time most of its business was in ore handling, but now it is mainly in coal. It recently supplied equipment for the new Hong Kong power station, for which GEC is the main contractor, and built a major system for the Port Talbot steel works. It is also carrying out work in Egypt and Mexico.

Competition is very tough, however, and the company is trying hard to sell its continuous unloader system, which it has adapted to be carried on board ship, either to be built in or added later as a modification. As with other companies in this heavy end of the industry, Babcock-Moxey is going through a difficult time and the predicted boom in coal transport is a welcome development.

Another British company which has suffered from the decline of the UK market is Redler Conveyors, part of the Brockhouse Group, although it has more than made up for it abroad, winning a Queen's Award for Exports this year.

The company's sealed all-steel standard conveyors have long been the mainstay of many systems world-wide, and the recent grain silo explosions in the U.S. gave a boost to sales, since Redler conveyors can have pressure tight casings to avoid ignition risks.

Around 40 per cent of the company's business is in grain handling, and it supplies complete packages including elevators, weighing equipment and other ancilliaries, often under sub-contract. Most of its recent activity has been in the Middle East, where capacity to handle incoming grain has been increased enormously in recent years. It is just completing a £7m contract in Iran.

Henry Simon Contracting, one of the strongest UK companies in the grain handling and processing sector, often buys in the conveyor equipment from Redler, while foreign competition comes mainly from Buhler-Miag in Germany and Ocrim in Italy.

Around 50 per cent of Redler's products by value are exported, mainly indirectly through main contractors, and the company is therefore concerned about the performance of these companies against foreign competition. It has been *forced in recent years to look* abroad for contract business, and has also successfully made more use of its design and technical expertise.

In the UK GEC has remained a major customer, and ICI has recently bought more than £1m of equipment. Cement, chemical and the coal industry remain major users of its conveyors, and the company has recently developed a new high specification system for coal feed to avoid explosion risks.

This has recently been on test in an Alcan plant and on the strength of this Foster Wheeler has ordered 24 systems for installation at a plant in India. The new design has also cut the cost by one third.

In the bulk handling sector in Britain a few well-established companies, which include Adamson-Butterley, Fletcher Sutcliffe Wild, GEC Mechanical Handling, Strachan and Henshaw, Cable Belt and Anderson Strathclyde, dominate both the industry and exports, while there is a host of smaller companies, often dependent on one sector or product, making up a highly fragmented industry.

Between 1975 and 1978 the domestic conveyor market has remained stagnant but as a result of improved exports and a reduction in import penetration, there has been an increase in output and an improvement in the trade balance. The UK share of the world market has also risen steadily in the past few years although it is still *way behind West Germany and* about half that of France.

It is estimated that about 60 per cent of conveyor companies *are direct exporters, while* nearly 10 per cent of companies export more than 40 per cent of their total sales. Around 2 per cent of the sector's largest companies *account for about 20* per cent of direct exports.

The increasing importance of exports for the industry has led to recent co-operation between the Mechanical Handling Engineers' Association, and the National Economic Development Office, and it is intended that an industry export conference to discuss the broad question of exporting will take place in the not-too-distant future.

One successful scheme to use the joint resources of the industry to promote exports has taken place in Venezuela, regarded to be a prime market due to its considerable mineral resources and oil revenues which are likely to speed up their exploitation.

MOMEX (Mechanical Movement of Materials Export Group) has been set up in Venezuela, with a full-time representative resident there, aimed at winning orders for its 12 member companies which include seven conveyor companies, one other mechanical handling manufacturer, one merchant bank, and the National Enterprise Board.

Members include British Ropeway Engineering, Don Valley, IDC Consultants, Taylor Woodrow Construction, Stothert and Pitt, Universal Conveyors, Arbuthnot Export Services and Dunlop Belting.

Although MOMEX has yet to *win any orders, its operation is* regarded as an important co-operative step within the industry and after a period of consolidation further such ventures are expected to be considered, since they offer considerable cost benefit advantages.

Perhaps one of the clearest indicators within the industry of overall demand, is the level of orders for belting from the major UK suppliers, who are Dunlop Belting, Goodyear, BTR and Uniroyal. These companies are major suppliers to dozens of smaller companies which add mostly metal conveying units to the basic belts.

Dunlop reports that demand has been fairly flat recently, but attributes this mainly to the British Steel Corporation strike, since it is a major buyer of *belting.*

However, the belting sector as a whole is highly dependent upon a very wide spread of industry for the major part of its business, which is replacement belts. It points out that if the economy slows down, Dunlop's output does at exactly the same rate, since belting used in manufacturing, building, and every activity does not wear out so fast.

Overall, there appears to be a good outlook for some sectors of the bulk conveyor industry, particularly that associated with coal handling, while many of those companies wholly dependent on the UK market can expect little in the way of rapid growth.

Lorne Barling

THE UK CONVEYOR INDUSTRY

(£m—1978 values)

	Output	Of which exports	%	Apparent home consumption	Of which imports	%	Trade balance
1975	270	44	16	248	22	9	+22
1976	263	42	16	245	24	10	+18
1977	265	51	19	236	22	9	+29
1978	273	48	18	251	26	10	+22

Source: Analyses of Department of Industry and international trade statistics. World trade has been estimated from the exports of the ten principal mechanical handling exporting nations.

CONVEYORS

WORLD TRADE SHARES

(per cent)

	1975	1976	1977	1978
West Germany	40.1	41.2	42.1	38.1
France	19	13.9	13.2	15.6
Italy	9	7.9	7.9	8.9
Bel-Lux	2.5	2.9	3.1	3.7
Netherlands	4	4.8	6.1	5.6
U.S.	9.9	10.3	8.8	9.4
Japan	7.9	10.8	9.3	8.5
Spain	0.9	1.8	1.3	1.6
Sweden	1.5	1.3	1.3	1.3
UK	5.2	5.1	6.9	7.3

Source: National Export Statistics

Some concern in unit load sector

THE UNIT LOAD sector of the British conveyor industry is heavily dependent upon capital *investment by domestic industry* to sustain its output, and although many such companies have a good backlog of orders, there is some concern about the prospects over the next 18 months.

It is increasingly evident that Britain's manufacturing industry is responding to its liquidity problems by deferring investment plans, often those regarded as non-essential such as the replacement or improvement of conveyor systems in factories.

Although outdated conveyors may be costly in terms of their effect on output, it is felt by many companies that in the present economic climate it may be better to live with that sort of problem rather than spend large amounts on new equipment. This is now being reflected in order books.

Conveyor systems of various types are common to most factories, but their greatest use is probably in the *finishing* trades, which may cover any form of painting, coating or processing, and is part of the manufacturing process for a large range of domestic appliances. It is estimated that around 90 per cent of systems are of the overhead variety.

Broad base

One of the most diverse companies manufacturing conveyors is GEC Mechanical Handling, which is now benefiting from the broad base of its activities. Just over 30 per cent of its products were exported last year, compared with 41 per cent in 1978, but this figure is expected to rise again this year.

For a company which ranges from very-high-value ship unloaders and process plant to postal sorting equipment, it is difficult to identify a trend, since one large order can radically alter sales volume, but it believes that in the UK orders are becoming more difficult to win. However, the company's considerable strength allows it to benefit from the failure of smaller competitors to offer realistic bids for contracts.

On the unit handling side of its activities, its mechanical automation division has successfully provided letter sorting equipment to the Post Office's specification for a number of years, but due to this design requirement has generally been unable to sell the equipment abroad.

GEC also supplies a range of unit-handling equipment for general industrial use, such as in the motor industry, and the company as a whole had a turnover of more than £20m last year. It believes that the present problems within the industry can be overcome by being able to concentrate on strong areas of the market as and when they occur, both at home and overseas.

One of the newer companies in this sector, Hytrac, has built up a turnover of around £3m a year in Britain and £2m in the U.S. over the past 12 years, providing a wide range of unit loan conveyors, extending in capacity from two to three tonnes to mere ounces.

The company's sales director, Mr. Eric Wright, said the UK market was proving increasingly difficult at present, with the result that there was tough competition between the main companies he regarded as his rivals. These included Redman Fisher, part of Redman Heenan International, which is particularly strong in the motor components industry, and is in the final stages of a major contract to supply conveyor systems to BL for one of its new production lines.

Despite the problems of the motor industry, Redman Fisher points out that it has been a steady source of business over the past few years, and BL is expected to maintain a reasonable level of orders, while Ford has a number of improvement projects in hand. General Motors is also examining some of its conveyor equipment.

Fenamech, the materials handling division of J. H. Fenner, of Hull, markets a wide range of conveyor systems, and is active in the factory and warehousing sector with equipment for handling pallets. It is also in postal mechanisation as part of a consortium which includes Midland Dynama, George Robson (Conveyors) and Davies Pritchard and Richmond.

It faces considerable competition against many of its products from Sovex Marshall, which has five basic divisions dealing with airport and baggage handling equipment, general mechanisation for industry, document handling, and an automation division which deals mainly with components handling.

Sovex sees the airports sector as being somewhat limited in the UK by the relatively small number of new terminals being built, although there is likely to be a host of bids for the facilities at the new terminal planned for Heathrow. Having won a number of contracts of this sort in the Middle East, the company is optimistic about exports, but points out that several companies are competing for a small number of contracts each year.

Orders for general mechanisation equipment placed with Sovex in the past year or so have been at a satisfactory level, the company says, but believes that many of these projects have had to go ahead because they have been started or are nearing completion.

Lorne Barling

New approaches to warehousing

THE VERY considerable effort which the warehouse equipment industry has made to persuade British companies that they should adopt a completely new approach to storage appears to be at last having some effect.

The fact that Japan, West Germany and other countries are building fully automated warehouses by the thousand, while those in Britain are still numbered in hundreds, has been a very useful propaganda weapon for the industry. But the important aspect of what is happening in other countries—the degree of integration achieved when planning warehouses in relation to production, transport and flow of goods—is also coming home to UK companies.

It appears, however, that the message is getting across at a highly inconvenient time for most companies, since many are now thinking of ways to cut back expenditure or at least looking for investment plans that can be shelved without too much difficulty.

Although major equipment suppliers in Britain are receiving a high level of inquiries at present, and many of them are maintaining a high level of business, there is a worrying tendency for companies to draw up fairly detailed plans, pinpointing the problems of their existing systems, only to leave them pending.

Another response to present circumstances is to go for an improvement of existing warehousing facilities, often by introducing coding systems or computer-aided controls, although this can sometimes be expensive and involve the rebuilding of a complete scheme.

The most versatile and cost-effective "quick response" method of improving an inefficient or overloaded system is the mini-computer, which can vastly improve stock control and can often be linked to the company purchasing department when necessary.

Mr. Bob Wiliams, director of the National Materials Handling Centre at Cranfield, believes that in difficult times companies should go for a system which best suits their needs, rather than be over-ambitious and end up with a system which may have too much capacity and be costly in terms of capital expenditure.

He believes that the great reluctance by British companies to adopt the highly automated, high-bay warehouses of large capacity, as increasingly seen in countries like Switzerland, is because the economic pressures to do so have not been present in the UK.

The costs of space in the major manufacturing areas have not been high enough to drive industry up vertically, and labour costs have been comparatively low when compared with other European countries. There is also an extremely strong and persuasive lift truck industry in Britain which is good at selling its products.

There is even an example of a large toy manufacturer giving up an advanced warehouse scheme, because of over-capacity, and returning to a conventional system, although this is clearly against the long-term trend.

Whatever justification is put forward for the installation of new warehousing, the most important factor for companies, perhaps wrongly, is initial cost. Most manufacturing industry still regards warehousing as a necessary evil which soaks up otherwise productive capital investment.

Companies may also regard it as an investment which lacks flexibility, since a system based on lift trucks is not only adaptable in terms of capacity, but can be moved, sold or otherwise disposed of when necessary.

Finally, an automated fixed-track system of the more sophisticated kind can easily cost up to 10 times more than a lift-truck operation, meaning that there has to be a great deal more efficiency and other savings to justify the outlay.

These are the kind of objections, however, which a company like Mannesman-Demag has been countering for years, and now firmly believes that despite the economic problems, a number of factors are now forcing companies to face what Demag regards as the inevitable.

On the vital question of cost, it admits that fork lifts are cheaper, but points out that after around five years it will be necessary to replace them or at least undertake a costly overhaul. A stacker crane system, on the other hand, is likely to be operating perfectly well after 17 years, having been written off a couple of years earlier.

Demag is one of the most active companies in the automated warehouse equipment field, and is wholly owned by its West German parent, which manufactures virtually all the products of this kind. Its main compeitors are probably Munck UK and Fata, the Italian-owned company, at Milton Keynes, although their products vary considerably.

Demag's basic product is the Decombi system, which has been adapted from the German design for the UK market, and in a similar form is sold in many other parts of the world. It is a narrow aisle order picker and will cost upwards of £15,000, depending very largely on its application.

The company has also begun marketing a new model, the Decomat, which is advanced in that the whole system is built around the operator who is seated in a gondola cabin. The first of these was installed recently at BL's Unipart store in Coventry. Demag also sells a pallet handling system called the Destamat, which starts at perhaps double the price of hte Decombi, and offers considerable versatility, including the capability to do order picking.

Demag believes that companies which go for short-term answers to their warehousing requirements will spend more money in the end. It argues that an automatic system not only offers far more accuracy than anything else but will cost far less in down-time.

The company suggests that these factors—increasing labour and space costs—which have forced the rest of Europe into automation, are now making British industry move in the same direction.

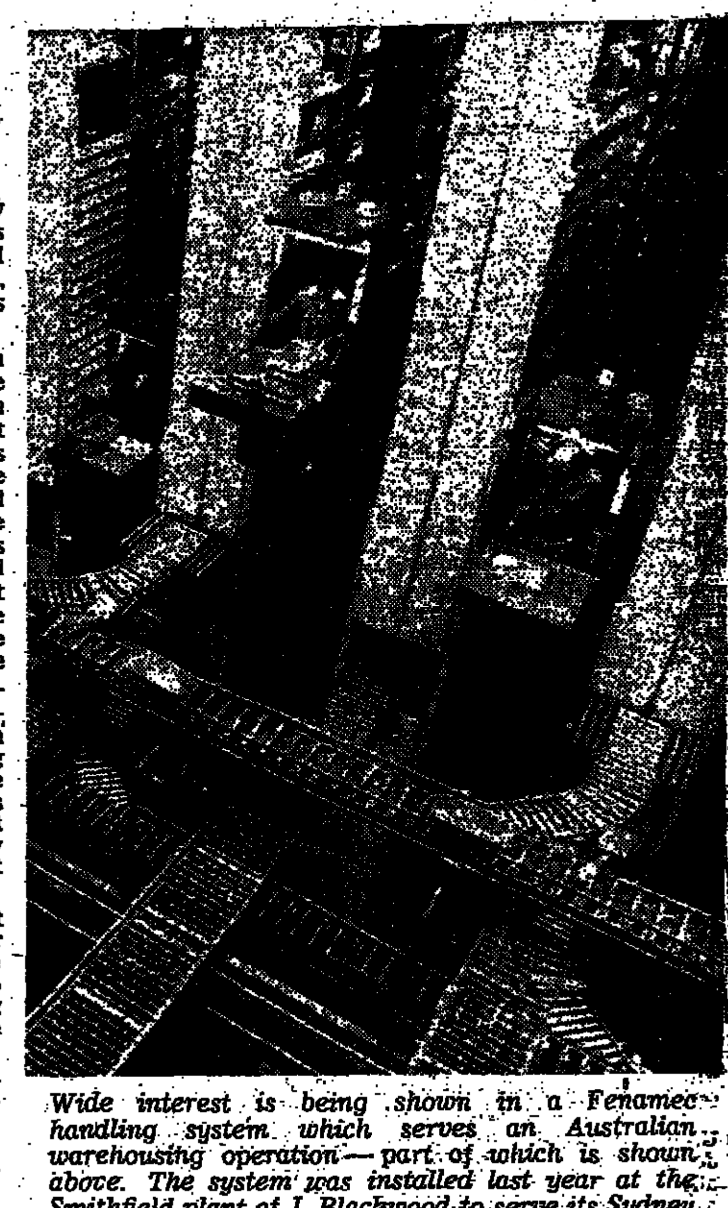
Demag believes that manufacturers of automatic warehousing equipment have enormous potential in the UK market, since virtually everything being serviced by a turret block or reach truck could be a market for a stacker crane.

The company is now planning to expand its facilities near Banbury, mainly for the purpose of increasing its output of mobile cranes, one of its other activities, but does not rule out the manufacture of warehouse equipment in the UK is demand increases.

It remains to be seen whether the British market is now beginning to realise the folly of investing in short-term warehousing methods which are costly in the long term, or whether those companies which have exercised caution and decided to stick with the trusted fork lift will think themselves lucky in doing so.

It appears more likely that it will be a mixture of both, where larger companies must invest in modern, efficient equipment if they are to remain competitive in difficult times, while smaller companies will be wise to retain as much flexibility as possible.

Lorne Barling



Wide interest is being shown in a Fenamec handling system which serves an Australian warehousing operation—part of which is shown above. The system was installed last year at the Smithfield plant of J. Blackwood to serve its Sydney industrial products division

Steady growth in leasing systems

THE VERY rapid growth of the British leasing industry has slowed slightly in the past year, and provisions in the recent Budget will have some effect on its operation—but, overall, leasing remains a well-used and effective method of financing mechanical handling equipment for industry.

According to figures from the Equipment Leasing Association, new business carried out by its members during 1979 was valued at £1.8bn compared with £1.2bn in 1978, an increase of nearly 50 per cent. This compared with the £675m of new assets acquired by ELA members in 1977, and the increase of around 80 per cent achieved last year.

No figures are available for the mechanical handling sector of the industry, but most companies assume that its growth has been broadly in line with that of leasing as a whole, and at a time of liquidity problems within industry it is likely that demand will hold up reasonably well this year.

Equipment which is leased most widely remains fork-lift trucks and cranes of many types, although the mobile variety is perhaps the most popular.

It is possible that at a time of stagnant or falling production within industry, there may be more of a tendency for companies to opt for short-term hire rather than leasing, but at the same time there may well be a swing away from outright purchase towards leasing if companies feel the need to retain their capital resources.

Two inter-related factors have a major effect on corporate decisions on whether to lease or buy; the company's individual tax position, and prevailing interest rates, assuming that it is necessary for a company to borrow for the purpose of renewing, for example, its fleet of fork lift trucks.

Although leasing may appear to be most beneficial for smaller companies which lack a broad asset base, they are more likely to experience cash-flow problems in difficult times and therefore need to consider the implications of a leasing agreement more carefully.

The essential aspects of leasing are that the leasing company, often a subsidiary of one of the major banking or finance groups, retains ownership of equipment throughout the period of the agreement. The customer (or lessee) benefits because the leasing company is allowed to depreciate the asset fully in the first year and pass on the advantage, with the exception of certain circumstances outlined in the Budget.

The 100 per cent first-year allowances for industrial and commercial concerns continue, as before—but, from June 1, a 25 per cent per annum writing-down allowance will apply to lessees who are non-residents of Britain, tax exempt bodies in the UK such as local authorities and central Government, and individual consumers.

Under the new provisions, a claim for 100 per cent first-year allowances will need to be accompanied by a certificate describing the plant and machinery and stating that it will be used for a qualifying purpose throughout the "requisite period." This period begins when the asset is first used by the owner and normally ends four years later, or on earlier sales.

It is not clear how the Inland Revenue will view deals that were signed before March 26 this year, but due to prolonged construction periods will not be brought into use for some time. There has also been some uncertainty over the Inland Revenue's attitude towards sub-leasing of assets which are exported, and consultations are taking place.

This was due largely to a consultative document on the subject which was drawn up towards the end of last year, which contained far more detailed proposals than those eventually contained within the new regulations.

Generally, the reduction in allowances was designed to prevent what was regarded as their misuse, and was accepted by most ELA members as being justified, although they will clearly have a considerable effect on some areas of business.

Attraction

On the export side, it had become attractive for a foreign company to acquire leased equipment from the UK on terms which were preferable to interest rates prevailing locally, and it is estimated that business of that nature worth at least £80m was done last year, although the figure may have been much higher.

It was also believed that the rate of increase of that business would have been high this year, since more and more companies were becoming aware of its advantages. As a result of the restraints now imposed, it is expected to decrease considerably.

Leasing business to local authorities and central government was estimated to have reached nearly £100m last year, since it was particularly attractive to borough treasurers who were up against restraints on spending, and despite the cut in the allowance, may continue to be in some circumstances, given the high level of interest rates.

The increasing level of leasing business by casual lessors was regarded as one of the biggest abuses of the tax allowance, since it had become a means of providing a tax shelter for high individual earnings. For example, someone with an annual income of £50,000 could buy leased assets of a similar amount and offset that against income-tax.

Last year plant and machinery remained one of the largest areas of leasing business with a figure of £415m, although it has been overtaken by cars as the biggest sector, which recorded business worth £466m. However, the growth of plant and machinery leasing has been remarkably fast, from a figure of less than £200m in 1977.

The major question for a company which decides that it does not want to bear the high capital costs of buying equipment, is finding the most suitable alternative method of acquiring it, since a number of options exist. The right choice can only be made by summing up a number of factors such as the length of time the equipment will be needed, whether the company is prepared to deal with maintenance costs, the importance of reliability, and the overall financial position of the company, particularly in relation to tax.

Under normal leasing arrangements, a company has the advantage of being able to choose exactly the kind of equipment needed and getting it new off the shelf, but at the same time is committed to that equipment for a period, which can vary according to the kind of contract drawn up. It is also faced with the normal running and maintenance costs, which may or may not fit in with other machines he is operating.

Contract hire, however, offers a greater degree of flexibility, although probably at a higher short-term cost. It also offers greater reliability since many contract hire companies operate a large fleet of fork lift trucks or have a range of cranes ready for hiring. In the event of equipment failure, alternative machinery is often available at short notice.

On the other hand, the major mechanical handling equipment companies which offer leasing arrangements are increasingly aware of the need to be competitive in a tough market, and are offering more immediate assistance in the event of reliability problems.

Hire purchase of equipment means that the user of the goods becomes the legal owner of the goods when the final payment is made, but for taxation purposes the company is treated as if it is the outright owner from the time of taking on the equipment, allowing it to take advantage of tax concessions.

Perhaps the best course for a company is to approach one of the major finance houses, or indeed one of the fork lift truck companies which operates its own leasing or rental scheme, to seek advice on the most suitable way of acquiring equipment, given its particular circumstances.

Outright purchase of equipment remains the most favoured method, and perhaps 35 per cent of equipment is now supplied on the basis of rental or leasing, but the leasing sector is continuing to increase as a proportion of the total market.

L.B.

Car industry is biggest user of robots

BRITAIN has been slow to adopt automation in all aspects of industry, let alone in mechanical handling applications. It lags behind West Germany, Japan and the U.S. It has been the car industry in the UK which has led the move towards industrial robots and mechanical handling equipment and is the country's biggest user.

There have been some initiatives recently to promote greater use of robots in the UK and even the Government has been more encouraging about the use of automation than about the development of microelectronics in the UK. The Department of Industry helped to set up the British Robot Association which arranges many seminars on the application of robots in industry.

The DoI also provided £200,000 to set up a Robot Advisory Services at the Production Engineering Research Association, in order to promote robots industry.

A part of the service is the establishment of a centre to demonstrate robots and automatic machines which can pick and place components which will, of course, have wide applications in mechanical handling.

Robots being designed in the U.S. and Japan are being developed so that they can actually identify various parts, using a visual discrimination system, incorporating a camera. They will be able to move parts into the correct position for feeding into other machines in the production process. However, such machines are still under development since they require sophisticated computer techniques and sensors.

Automation for mechanical handling applications have to cover an extremely wide range of industries. But Unimation, one of the largest U.S. robot makers, has said that about 35 per cent of all its inquiries are about machine tool loading and other uses such as unloading conveyors.

Human discomfort

In the main, robots are introduced into areas where human workers would find the environment unsuitable or physically uncomfortable. This consideration was a factor behind Metal Castings Worcester introducing robots to unload diecasting machines. The extreme heat of the working environment and the weight of the castings to be unloaded proved too difficult for human workers.

The company bought seven Unimation robots which it claims has improved production by 12 per cent because of reduced scrap waste. Metals Castings also says that the machines have proved to be highly reliable with only 10 to 12 hours downtime a year for maintenance.

Because there was great difficulty in finding human workers to do the job anyway, the company has not taken into account the equivalent labour costs when assessing the robots economics.

A similar difficulty in finding workers willing to load 50 kg sacks on to pallets made ICI develop its own robot palletiser. After work with Nottingham University and Swedish robot manufacturer, ASEA, a robot capable of lifting 10 sacks a minute was developed, as well as being able to handle bottles and yarn bales. The work took 18 months to do and cost about £1m in investment.

An industrial robot at Unimation's Telford, Salop, factory

They have been installed in ICI's smaller and more versatile manufacturing plants where the robot system has proved to be better than custom-built palletising machines. But ICI has criticised the mechanical handling industry in general for its slowness to adapt robots to be capable of mechanical handling tasks.

But this is an important area of growth, especially in using robots to carry out loading and unloading of machines in areas which are a health hazard.

Another example of a loading and unloading applications comes from Hoover, the domestic electrical appliances company, *which introduced robots* to load and unload injection moulding machines. These machines directly replace two men per moulding machine and the company says that the investment will be paid back over a two-year period.

Normally, the company would not introduce high technology in the general workplace because of the employment problems it would cause. However, Hoover encountered no opposition from the workforce because the robots replaced work previously carried out by contract labour.

Pioneered

Robots are often introduced to automate just one part of a manufacturing process but increasing companies use robot-handling machines to transfer work from one automated machine to the other. Many of those used in the UK are found in the car industry and in fact one of the first applications of this type was pioneered by car manufacturers as long ago as 1950.

Japan, which has about 125 companies making robots, one-third of all production in the car industry in 1977 was automated, with 7,000 then in use. Robots are used on car assembly lines for welding, to control sheet metal pressing, for painting and for assembling vehicles.

Most robots in industry operate entirely on a fixed sequence *of movements* in the future, it is likely that intelligent robots capable of greater versatility will become popular. The first will be able to identify components from their shape and, by the mid-1980s, it should be possible for them to detect colours as well.

In Japan, a long-term project, funded by its Ministry of International Trade and Industry, called MUM—Methodology for Unmanned Metalworking—aims to develop an almost completely unmanned factory employing only 10 people compared with 700 for the same output.

West Germany, which is also committing a considerable amount of funds to automation has concentrated on what is calls "Humanisation of life" which is intended to remove humans from work places which are either unpleasant or dangerous.

Unadventurous

Britain has been fairly unadventurous as regards use of robots, although there are one or two pioneering systems, for example, in mines. Microprocessors are used to control hydraulic roof supports which are placed along the face from which coal is extracted. Using this system, one miner can make all the supports advance in turn as coal is extracted to protect the face workers.

Fifty industrial robots move awkwardly-shaped television tubes from process machines to conveyors during manufacturing processes

Without this system, each pit prop would have to be lowered under the supervision of a miner so that it can be advanced and then raised again closer to the face. But with the microprocessor control, just one miner can operate the whole line of props from the safety of the roadway.

There are also several examples of automated warehouses where goods are carried automatically by conveyor belts and robot trucks from the moment they are unloaded from lorries. These systems are usually controlled by a computer system.

Each incoming item is equipped with a code which is "read" by a light sensor. The code on the goods determines where it is to be stored within the warehouse and the computer remembers where it has put the particular item.

To retrieve a particular item from store, all that the warehouse staff have to do is type in an instruction, giving the code for the part and the computer will call machinery into action to ensure that it is delivered at the particular exit for transportation.

In the design of such warehouses or stores, only the area in which humans are actually working have to be designed for human comfort. Other areas of the building can be kept at a lower temperature, thus saving fuel costs.

Elaine Williams

Lift industry in a low state

THE UK lift industry is still in a low state, with new business running at about 50 per cent of the sales achieved in the early 1970s, according to the National Association of Lift Makers (NALM).

Closely tied to the fortunes of the construction industry, lift makers have only been partially compensated during the recession by the current increase in modernisation and refurbishment work, said Mr. David Fazakerley, director of the association.

The 30 or so companies in the industry which the association represents, produce about 95 per cent of the sector's manufacturing output. Six of them — the leaders being Otis, the GEC-owned Express Lifts and Kone Marryat and Scott, now owned by Kone Oy of Finland — account for about 70 per cent of the industry's output and virtually all exports, according to a recent National Economic Development sub-sector report on the industry.

Most of the big companies in the industry are subsidiaries of multi-national companies. Otis, for example belongs to the U.S. giant of that name, and a large percentage of its exports are to Otis companies abroad. Exporting lifts is difficult—they are bulky and require a reliable service network, particularly as different countries demand specific technical requirements.

Some work has been done on standardising specifications but as the sector working party said: "The present Public Authority Standard (PAS) for goods and passenger lifts are as far as the Public Standardisation Team can go.

Close watch

"The Product Group has already said that it will take account of, but not necessarily align completely with the new BS based on EN81."

It said it was keeping a close watch on the progress of the directive "but this is an optional directive and the term 'European' regulation is not appropriate. Governments cannot enforce compliance with PAS and as far as replacement lifts and special site circumstances are concerned, compliance is not always possible."

Standardisation does have its benefits, in that it could improve UK competitiveness abroad, but it also brings a degree of risk. Import penetration of lifts and escalators appears to have increased as a result of a more standard product in the home market.

During the past few years the UK share of world trade in lifts has decreased steadily. According to Government figures the share fell from 7.7 per cent in 1975 to 6.6 per cent in 1978, with imports rising from 11 to 15 per cent during the period.

At the same time the domestic market has contracted fairly sharply. Between the 1950s and early 1970s, the industry enjoyed a sellers' market, with much construction work being done, particularly in the public sector. Thus in the early 1970s more than 7,000 new lifts and escalators were being produced every year. New sales have now dropped to just above 3,500.

Mr. David Fazakerley said: "Our industry tends to follow the construction industry on a time-lag of 18 months to two years. Therefore, with the present state of the construction industry our situation will not change greatly in the near future. Our concern is that there may be a further downturn in the construction industry before there is an upturn."

While at present there is some increase in office building in the London area the nationwide picture is depressing—particularly in the public sector, which accounts for nearly 50 per cent of the lift industry's sales and where Government cut-backs in expenditure, for example with the latest decision on abandoning new large-scale hospital developments, have halted many developments.

Saving money

There is some activity, though, in the modernisation of office blocks. Mr. Fazakerley said: "The outlook for the replacement market is not as bleak. A large number of lifts are now due for replacement. However, this is tempered by the fact that companies are not eager to spend money on modernising lifts if they can continue in use for some further time, even if they are not providing as efficient a service."

In this replacement market, as well as the new lifts market, manufacturers can now introduce new technological developments. Kone Marryat and Scott (KMS) recently announced what it believed was the first UK gearless group installation using a micro-processor system.

Mr. Keith Lindus, managing director of KMS, said: "The micro-processor brings a number of advantages, the foremost being more computing power in a smaller space with the same inbuilt reliability of the conventional solid state system. In addition to group control the KMS micro-processor system also provides for solid state motor control with its inherent energy-saving characteristics."

KMS says that the savings of machine-room space makes the micro-processor ideal for modernisation of existing lift installations without major re-building work. The new system is currently being installed in the Thorn headquarters building in London.

Much of the industry's business, however, is in the maintenance and service field. That side of the business keeps us going during depressions in new business," said Mr. Fazakerley.

Liability

But this part of the manufacturers' business is under attack. A number of local authority direct works departments have started doing their own service work and a number of small maintenance companies have sprung up, often operated by skilled workers who have left the larger manufacturers. Currently these specialists service companies probably have about about 20 per cent of the domestic lift maintenance market. The sector working party said that these small independent maintenance companies strongly interacted both with the traditional pricing policy of the industry, where maintenance represents the most profitable part of the industry's operations, and with the increasing imports of lift parts and components and the introduction of "Uni-parts."

A number of legal points arise from this development, particularly the responsibility for product reliability in cases where lift manufacture and lift maintenance are not done by the same company.

There is little the trade association can do to affect or arrest the growing amount of trade being done by the independents but the industry is looking at ways in which it can take effective defensive action.

Liza Wood

Growing diversity of lifting equipment

THE LIFTING and winding equipment sector is probably the most diverse section of the mechanical handling industry—both in terms of products and manufacturers.

British manufacturers face the growing challenge of imports, particularly from Japan and the Far East, in an already competitive home market and the task of maintaing, if not expanding, exports in a contracting world market.

Nevertheless, despite the additional burdens of the current strength of Sterling, inflation in Britain and recent oil price increases, the UK industry, as a whole, has managed to halt the erosion of market share in recent years and maintain a small but jositive trade balance.

The wide product range and fragmented structure of the lifting and winding equipment sector has added to the problems of those groups, such as the Mechanical Handling Sector Working Party of the National Economic Development Council, which is trying to establish a coherent industrial strategy for the industry.

Clearer picture

However, attempts to come to grips with these problems have, perhaps for the first time, resulted in a clearer picture emerging of the structure and nature of the lifting and winding equipment industry and its markets.

The UK industry contains around 100 manufactures. The fragmentation of the industry is reflected in estimates which suggest that the seven or eight largest companies account for about 30 per cent of the industry's output while the 50 smallest companies supply less than 20 per cent of total output.

Industry surveys have also shown a considerable variation in the size of companies within the sector although the 40 companies with sales of between £1m and £5m a year account for about 50 per cent of total sales.

Many manufacturers also form part of the operations of sections of international companies and almost half the companies in the industry employ less than 50 employees.

The industry's products include winches, capstans and lifting jacks and a variety of loaders including tail gate loaders on lorries, lifting platforms and access equipment, such as scissor lifts. Products tend to be more simple and of lower unit value than for the other sections of the mechanical handling industry although there are clear exceptions.

Within the sub-sectors of the lifting and winding equipment industry there are further product groupings and significant differences in market and product development.

One of the most dynamic sections in recent years has proved to be the manufacture of access equipment, and in particular the development of hydraulic platforms.

The largest section of the market for access equipment comprises truck-mounted equipment, able to travel on the public highway. Other sections include off-highway equipment which is self-propelled and powered or manual industrial platforms, such as those used in warehousing.

The UK market for truck mounted equipment is dominated by the market leader Simon Engineering Dudley, part of the international Simon Engineering.

Simon's success is founded on the development of hydraulic platforms used for a variety of maintenance and construction functions and, incidentally, by an increasing number of fire brigades. The company's products range from a model with a working height of up to six metres (20 ft) to a triple boom model capable of reaching 31.5 metres (103 ft).

The company exports 70 per cent of its output to over 100 countries throughout the world—making it one of the half-dozen UK companies in the sector which exports more than 50 per cent of its output. Simon, in common with the other large UK-based manufarturers in the industry, recognises the importance of exports since the UK market on its own is insufficient to support the scale of production the company needs.

In contrast, Ratcliff Tail Lifts, a British company which, founded in 1964, has come to dominate the fast expanding market for vehicle mounted platform lifts and which now claims up to 85 per cent of the UK market, has to date failed to make any real impression in the Continental export markets.

Nevertheless, Ratcliff is now introducing an entirely new type of hydraulically-operated lift—without the traditional columns and cables—aimed at winning a share in the expanding Continental market. Both the export ratio and import penetration of the lifting and winding equipment industry is higher than for an other section of the mechanical handling industry.

Historically, the sector has operated a very close relationship between manufacturers and distributors with both complementing their product ranges with bought-out finished products. Estimates suggest that almost all companies complement their product ranges with some bought-out products and that bought-out products may total almost 30 per cent of total finished products.

This practice is of particular concern within the industry—particularly because figures also suggest that about half the companies which bought-out some of their finished product range import at least some of these products.

This has led to calls for a greater degree of co-operation between UK manufacturers in the design of complementary product ranges and—since some imported products appear to be imported by manufacturers because of their attractive price—for new investment in high volume production.

Despite the difficulties, the growth of imports of lifting and winding equipment into the UK (about half of which come from the EEC) appears to have halted. Indeed, imports which totalled £36m in 1978, have fallen slightly over the past five years corresponding to an improved share of the home market for UK producers.

UK exports

About 85 per cent of British manufacturers export some of their finished products, although exports appear to have fallen in both real terms in recent yeasr and as a percentage of company output.

The main problems identified by UK manufacturers in exporting include difficulties in matching foreign competitors' prices which sometimes appear artificially low, the costs of exporting and difficulties because of UK inflation and the current strength of sterling and trade barriers in overseas markets including the complex nature of safety and technical standards.

These difficulties together with the impact of a declining world market have been reflected in a worsening trade balance for the industry, although it still remains positive, and a reduced, albeit currently stable, share of world trade.

In 1950 the UK's share of world trade for lifting and winding equipment was around 25 per cent. In 1978, its share of a £790m market was only 6.1 per cent.

World trade in lifting and winding equipment has always been high but the most significant recent development has been the substantial growth in Japan's share, and that of other Far East countries, apparently largely at the expense of the U.S. and Sweden.

The substantial growth of Japanese exports in this field has pushed Japan into third place in the league table with around 13 per cent of the world market behind the U.S. and West Germany.

There is certainly no shortage of industry-based explanations for the relative performance of the UK industry—or suggestions for improving performance.

Mr. Gilbert Simm, managing director of Tirfor, the Sheffield-based lifting equipment manufacturers who is also chairman of the lifting equipment section of the Federation of Manufacturers of Construction Equipment and Cranes (FMCEC) blames a number of factors for the industry's decline. He ists among them the industry's inability to change and adapt to new market requirements, inability to invest in modern manufacturing equipment and techniques, a slowness to attack overseas markets and the UK's stringent safety regulations which, while impoed on UK manufacturers, leave "large loopholes for imported goods."

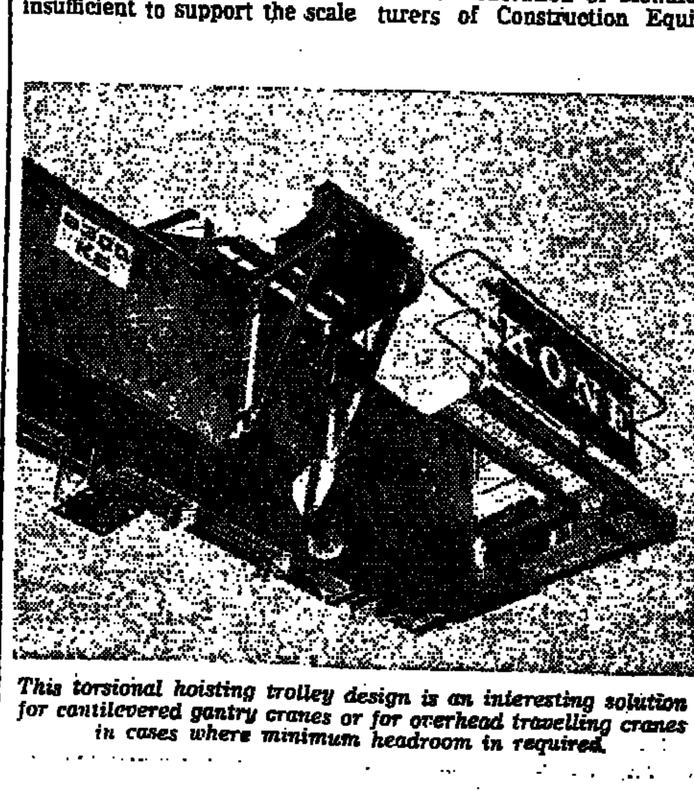
Mr. Simm links these factors to the buyers' unfortunate preference for price before quality. Similarly Simon, which has based its management philosophy on "absolute reliance on safety and reliability" echoes the need for purchasers to consider other factors including safety when buying equipment.

The company, as with other major exporters within the industry, also stresses the urgent need for a rationalisation of international standards citing, by way of example, the fact that a "standard man" in France weighs twice as much as the "standard man" in the UK.

Other key factors in the future of the industry are likely to be improving productivity within the industry by reversing the current declining level of output per man, and improving competitiveness which will, in part, depend on new investment in more efficient volume production processes.

The UK industry itself remains relatively confident that it can ride out the recession although inflation, the strength of Sterling, and the downgrading of investment plans in general must cause some concern. The manufacturers' unexpected optimism rests on the belief that the need for new or replacement mechanical handling products has been maintained during previous downturns in economy activity—and may, therefore, be expected to continue to do so.

Paul Taylor



This torsional hoisting trolley design is an interesting solution for cantilevered gantry cranes or for overhead travelling cranes in cases where minimum headroom in required.

UK LIFTING AND WINDING EQUIPMENT INDUSTRY INDICATORS (£m)

	1975	1976	1977	1978
Total output	102	108	113	108
Exports	53	53	53	48
per cent	(52)	(49)	(47)	(44)
Domestic consumption	84	98	101	96
Imports	35	43	41	36
per cent	(42)	(44)	(41)	(37)
World trade (approximate)	885	900	900	790
UK share (%)	6.0	5.9	6.4	6.1
Trade balance	+18	+10	+12	+12

Source: DoI and trade statistics.

Increasing importance of automatic assembly

FIFTEEN YEARS ago when automated assembly equipment began to appear over the horizon in significant quantity the UK was also getting off the starting line. But the engineering industries were so slow in accepting the technology that the hopes of the prospective suppliers were dashed. A substantial number withdrew, including some outstanding companies which had planned to be in the forefront of developments.

Today the very few independent UK companies still offering automatic assembly lines—it is hard to think of more than two or three—find themselves confronted with American and European rivals that have established subsidiaries, licensees and agencies over here. Competition from Europe is keen — as exemplified by the challenge from Seiv, a subsidiary of France's Renault in the motor industry.

Such competition becomes all the more pronounced when, as now, volume industries making cars, cookers, refrigerators, washing machines and the often complex components that go into them are suffering recession. Still, with wages trying to keep up with inflation, automation should offer some compensation. But the high cost of borrowing for an expenditure that could involve a modest component supplier in, say, £60,000 for a fairly simple installation, and up to £500,000 for a more sophisticated set-up, is a considerable deterrent to investment. So perhaps it is not altogether surprising that there should be a somewhat schizophrenic attitude among managements.

To quote one manufacturer: "Production engineers are tearing their hair trying to get an assembly line in. They know the benefits it can bring but their management boards are being cautious about giving the go-ahead. We've been waiting two years in some instances for a decision."

This comment was echoed by another who said: "The attitude in Britain is diabolical. Whereas our American parent is selling by the dozen we are hard pressed to sell one at a time. After 12 years it makes you want to weep."

Much depends on the payback time on the investment. Customers are generally reticent about this, but in many cases it appears to be two or three years and quite often considerably less. This would seem to make the proposition at least superficially attractive. But there are still many component makers who employ women part-time workers for assembling small items. It is relatively inexpensive labour and the women can quickly pick out faulty parts in time and generally provide an individual quality check. Similar faults in an automated assembly line will stop it dead.

Automation imposes much more severe disciplines all along the line. Tolerances have to be closer and more consistently accurate if the parts are to be assembled continuously. This may need quite extensive redesigning or updating of machinery either at the supplier's end—or, if the parts are from an in-house source, within the manufacturing company itself.

Implications

Automatic assembly also imposes other disciplines by involving just about everyone in the manufacturing team—designers, suppliers, machine tool makers, production and quality engineers, personnel managers, shop stewards—in fact almost everyone except the operators, though here too there can be problems if labour has to be reduced. Indeed, the wider implications, as well as any problems, are almost certainly more evident to middle and lower management than they are to the board room, where the investment is likely to be seen primarily in financial terms. Can it be afforded and is it worth the risk of upsetting the unions?

The smaller and family-type concerns will view it in the more intimate terms of possible lost jobs and perhaps redundancies among long-serving employees.

Nevertheless, automatic assembly is becoming an increasingly important factor in the fight against inflation and the retention of markets in a period of declining world demand. It comes in several forms, from comparatively simple three-part rotary assembly tables for putting in aerosol valves, parts of a tyre pressure gauge, fuse caps and other small components to a 40-50 ft line with five to eight stations turning out a completed complex product by microprocessor controls.

The essential prerequisite for automatic assembly is volume production for without it the installation cannot be kept fed for three-shift working, and while there is some flexibility as between different models of the same product, it is somewhat restricted. The motor industry provdide an obvious place for its introduction and it is widely used in the assembly of connecting rods, cylinder heads, shock absorbers, water pumps and, more recently, alternators. Elsewhere automatic assembly is used in the production of light switches, dry batteries, clocks and water taps, examples that show the spread of installations.

The speed at which assembly is done varies considerably, depending on the application, but 40 assemblies a minute of a small component is not out of the way. Larger and more complex components may take 5-12 seconds to complete. Actuation is by conventional means, such as pneumatics or electrics.

The first stage in a typical operation is a dimensional check of individual parts with perhaps a non-destructive or leak test where appropriate.

The second is likely to be a bulk store of needed parts to provide at least a half-shift of work. The parts are then fed and presented to the assembly line, which may have several stations according to the number of operations necessary to complete the product, with a sign-off test facility at the end.

While the product may be of the same type, it may be in different sizes or have different fixing arrangements. A water pump for a car, for example, has five or six parts. It will have a different pulley to suit different car models, and the casting is also likely to be different to accommodate various methods of fixing to the cylinder block. But all are likely to have the same impeller, shaft and bearings. Thus to cover the range of water pumps models it will probably be necessary to have twice as many different parts in the parts store as are needed for a single model. These variations can be encompassed, though it will entail more work on project engineering in the drawing office to make certain all the different parts will fit together.

Microprocessor - controlled asembly lines take manufacturing appreciably nearer the completely automated factory in which the main employment for humans will be in loading and unloading and in maintenance of equipment. The assembly microprocessors will be "talking" to a supervisory cmputer which wil lbe co-ordinating and overseeing the total operation of machining, automatic tool changing, testing and inspection. The Japanese, Americans, Czechs and other are looking hard at the possibilities of putting together the various modules, or building blocks, for just this purpose, and the unattended factory is likely to become a fact within the next decade.

The knowledge and experience exists in this country to keep pace with the developments, but the current industrial and financial climate is not helpful.

People are reluctant to make major investments of this kind before they can see light at the end of the economic tunnel more clearly, with the result that profit margins for makers of automated assembly equipment are apt to be slim.

Moreover, foreign competition from Germany, France, America and elsewhere is expected to intensify over the next year or two while the recession lasts. But as one manufacturer put it: "Really all we have to do is to get people to have faith in this country. That's what it boils down to."

Peter Cartwright

More efficiency in food processing

IMPROVED MECHANICAL handling efficiency is likely to be given a higher priority by food manufacturers in the 1980s as the operating pressures on the industry continue to mount.

Food processing has always been heavily dependent on good mechanical handling procedures, since it is a high-volume, low-margin industry whereby any improvement in operating efficiency can reap dividends in improved profit margins. But the growth of pressures on food manufacturers during the past decade has made such technical improvements in efficiency even more vital.

On the one hnad, food manufacturers have been faced with soaring cost increases for raw materials, labour and energy.

Yet, the ability of food companies to pass on these costs in the form of higher prices has ben hampered by two factors. One is the almost static level of volume demand for food which seems unlikely to show any real growth over the next few years. The second factor has been the ability of the major supermarket chains—who have been fighting a High Street price war—to squeeze large discounts out of food manufacturers who are anxious to manitain their volume production at the expense of their competitors.

These pressures have forced food companies to look more critically at their operating procedures in order to find extra costs savings. The supermarket chains have also been forced by the pressure on their own margins from the price war to improve their own mechanical handling. The Asda superstores chain, for example, has been one of the pioneers of using caged pallets within its stores.

In the broadest sense, mechanical handling in the food industry encompasses all stages from the farm to the consumer. In these terms, the industry is one of the largest in the country and, as to be expected, there are as many different ways of meeting mechanical handling problems as there are companies.

An example

One typical example of a mechanical handling development is at Pedigree Petfoods at Melton Mowbray in Leicestershire. The company last year installed a new conveyor installation which comprises a mixture of belt and gravity roller conveyors and incorporating a 180 degrees curved belt. The new installation forms the major part of a dry cat-food packaging line, forming the essential link between the carton filling and packaging machinery.

The three-metre-long belt conveyor carrying the cartons from the filling system is fitted with a pneumatic stop which acts as an accumulator should there be any minor hold-ups in the system. The cartons are then passed on to an accelerator belt which shoots them forward, spacing them out sufficiently to allow for efficient changes of direction at a later stage.

A case-packer leads to a palletising line, while from the shrink - wrap machine the "Bendveyor" system (from Sovex - Marshall) carries the cartons round a 180 degree bend to a coding station. Then they travel via belt and gravity roller conveyors to the palletising area.

The "Bendveyor" is a curved belt conveyor which carries unit loads safely and securely around corners from 30 degrees to 180 degrees without interruption of flow or reduction in speed. A major factor which decided Pedigree Petfoods on the suitability of purchasing this machine was that otherwise up to three separate straight conveyors would have been needed.

Another food company using an unusual conveyor system is Cadbury - Schweppes' operation in Nigeria for transferring Bournvita from granlation to storage bins.

The "Rolabelt" system used (made by MJP Machinery of Altham) basically comprises a rubular track with a continuous belt running above. The belt, which is corrugated and semi-circular in cross-section, is in modules of 333 mm supported and joined by cradles of a light-weight alloy. Each cradle has its own undercarriage.

The system can negotiate inclines up to 35 degrees in its standard form and with the insertion of baffle plates to prevent the material flowing back, can go up inclines of 70 degrees.

When the Bournvita granules are to be discharged at a predetermined point, a pneumatic arm is actuated with flexes a sprung steel rail running alongside the track, a form a type of cam. As each crdale approaches the discharge area, it is progressively tilted sideways and its load is emptied.

A prime example of mechanical handling in retail food distribution is given by the Bejam frozen food group. Bejam has more than 150 freezer food centres throughout the UK. It stocks more than 500 freezer lines, 165 bulk-packed grocery products such as tea and coffee, plus approaching 30 different models of freezers.

Keeping some 300,000 shoppers a week supplied with more than 2.25m packs of frozen grocery products imposes a substantial strain on Bejam's mechanical handling and distribution systems.

Freezer food centres south of the River Thames and across to Wales and the West are served by a massive 34,000 cubic metres cold storage depot opened three years ago at Frimley, Surrey. This is unusual, in cold store terms, not just for its sheer size but in its us eof five levels of racking to pack as much as possible on to a given floor area.

An average of 22 incoming vehicles a day means about 450 pallet loads to be seen in by five checkers and warehousemen. The target set by Bejam is two to three weeks' stocks and a flexible pallet system that helps to ensure that racking is used to full advantage. Identification tickets, for example, are used in a colour that is changed every month. These not only show the code number under which each pallet was checked in, as well as pack size and quantity, but also provide an immediate check on strict stock rotation.

Extra loads

Five or six Lansing Bagnell fork-lift trucks are kept busy almost continuously, serving a total of 3,860 pallet locations in seven double-sided and two single runs of racking. While two metre aisle widths would accommodate the trucks, allowance of a further 750 mm means that additional loads can be bulk-stored two abreast and five high in the aisles when required, using pallet convertors.

Operations are planned each day to minimise interference between the high-speed, high-lifting reach trucks and the six stand-on pallet trucks used for picking up — all of which is from floor level, with back-up stocks in the upper tiers of racking.

Bejam has about £¾m worth of industrial trucks and places almost total reliance on Lansing Bagnell models.

Yet, as a recent report by the National Economic Development Office made clear, British food manufacturers are increasingly having to look overseas for new machinery to help improve mechanical handling.

The report suggested that "the evidence indicates that the major areas of technical weakness, in terms either of inferiority or absence of UK machinery, lie in the meat, brewing, soft drinks, biscuits, chocolate, confectionery, ice cream, and oils and fats sectors.

In margarine production, for example, the report says that machinery suppliers need "increasingly to be able to offer complete systems of machinery whether based on the use of the paper wrapper or the plastic tub." It adds that "a complete line, not an assortment of separate machines from different sources, is what the customer wants."

In the meat sector, the report points out that much of the primary processing is along a conveyor system. However, it discovered that processors preferred Scandinavian machinery because their equipment linked together to form an integrated and highly automated system.

"If British sources had been used the purchaser would have had to undertake the design and project management himself," the report says.

The report recommends a much closer relationship at an early stage between food processing companies and machinery suppliers to help develop UK chemical handling systems.

David Churchill

Heavy reliance on imported machinery

EFFICIENT MECHANCIAL handling of the materials used in drink production is as important for Britain's beer, spirits, and soft drinks producers as it is for the food industry in general. With such a high volume and bulky operation, profit margins are traditionally low—thus making it vital to obtain the most effective throughput of materials.

Unfortunately for British engineering companies, however, UK drink producers during the 1970s were forced to look abroad for their materials handling machinery to ensure that costs were kept to a minimum and efficiency was maximised. In part, this reliance on overseas machinery was forced on the brewers, in particular, by the rapid growth of demand for lager throughout the 1970s.

At the beginning, of the decade, lager accounted for just under 10 per cent of beer sales. But changing social tastes and a succession of warm summers meant a dramatic surge in sales which now account for almost 30 per cent of all beer sold in Britain.

This rapid swing to lager led to a bunching of orders for production vessels and UK sources had been unable to offer acceptable delivery times. But the problem with lager production was that the production process also required longer storage times—and therefore greater capital costs—than for traditional beer production.

The lengthy process of lager brewing — from malting to bottling—has meant an intensification of brewers' efforts to improve materials handling. In the brewhouse, for example, mash filters and "lauter tons" are being introduced which lead to significant increases in the number of brews which can be achieved in a day. By speeding the filtering process, 12 brews a day are being achieved instead of two.

Perhaps the most significant development in lager equipment has been the introduction of cylindrio-conical fermenting vessels, replacing the traditional square or horizontal ones. Since lager production involves bottom fermentation using yeast which sink to the bottom of the vessel, rather than rise to the surface, cylindrio-conical vessel allows the yeast to be separated out from the bottom.

Savings achieved by some brewers in the process time for lagers has been siginficant. In the 1960s, the process time amounted to eight weeks from brew house to packaging. Now it is only two weeks for draught and three to four weeks for canned lagers. Similar improvements, in fact, also apply to keg ales which now take six days from brew house to packaging.

Much work has also been undertaken by the brewers in the areas of packaging and other aspects of handling, which tend to be labour intensive. Substantial improvements in productivity are also likely to be sought in this area.

The variety of types and sizes of containers adds significantly to the problems of packaging and handling.

Apart from cans and bottles, the beer can be supplied in kegs or casks each in four main sizes —9 gallon firkins, 18 gallon kilderkins, 36 gallon barrels, and 54 gallon hogsheads.

Clearly, the larger-capacity containers are the more economic in terms of container cost, but they are also capable of significantly faster throughput on the filling lines. For example, the firkin is a widely-used container size, but there is a drop in throughput of over 2,500 gallons an hour using this container, compared with barrels.

However, given the perishable nature of beer, and relatively slow throughput in many retail outlets, there is little that can be done to overcome this problem. The main feature, however, of the drinks sector's handling development has, as already mentioned, been the imports of foreign equipment. According to a recent National Economic Development Office study, imports of packaging machinery—mainly from West Germany, the U.S. and Belgium—have covered a wide range of equipment. This includes high-speed bottling lines, high-speed can fillers, craters and decraters, palletisers and depalletisers, case-conveying systems, plastiwrap systems, and labelling machinery.

According to NEDO, some 80 per cent of beer on the Continent is bottled or canned and West Germany was the dominant supplier of bottle-filling machinery. NEDO points out that when British brewers changed from bottles to cans, they purchased U.S. filling machinery. But there were subsequently three well-established Continental manufacturers of can fillers whose machinery was increasingly bought in preference to U.S. equipment.

Two West German companies dominated the market for high-speed labelling machinery, according to the report. For crating machinery there were three UK suppliers, but their machinery was not capable of operating at the high speeds—800 to 1,200 units per minute—required.

The major Continental machinery companies—who are much bigger than their British counterparts — include Alfa-Laval from Sweden, Holvrieka from Holland, Meura from Belgium, Ziemen from West Germany, and Steineker, also from West Germany.

The engineering work on the new Courage brewery at Reading was carried out by Alfa-Laval, for example. The Courage contract—worth some £5m—was the largest single brewery order received in the UK by Alfa-Laval and was won after three years of intensive negotiations.

There is a growing tendency, says Alfa-Laval, for companies to look to one manufacturer to supply all their equipment needs to ensure mutually compatible equipment and to receive delivery, installation, and servicing all in the same package.

The equipment installed at the Courage brewery is controlled by three mini-computers supplied and installed by Alfa-Laval. At the new Vaux brewery in Sunderland, for which Alfa-Laval are also involved, there is what is claimed as one of the most advanced control systems in any European brewery, involving a two-computer system with one in operation and one on permanent standby.

Following the NEDO report, however, the drinks industry has expressed increased willingness to buy British where possible. The major UK company on the bottling and canning machinery side is the Vickers subsidiary, Vickers-Dawson.

Vickers bought the engineering business of Dawson and Barford in the early 1970s for around £1m. Vickers-Dawson's major seller in the past few years has been its "Silver-stream" bottle filling machines which the first "all-British" fillers introduced on to the UK market. Vickers has also been successful with its mechanical de-crating and re-crating machines.

In the 1980s, therefore, the growing need for efficient production to keep costs down will provide plenty of opportunities for UK handling equipment manufacturers—if they can meet the performance criteria and price levels of their European counterparts.

David Churchill

New ways to cut costs

HANDLING COSTS account for a significant proportion of total operating costs i most industries. The Department of Industry is anxious to reduce the incidence of handling costs without, in any way, diminishing the value of the goods produced, and from time to time has tried to divert the attention of industry towards the problem.

Materials handling was included in the work of the Committee for Industrial Technologies of the DoI, which concentrated on three main aspects: (a) identification of the size of the problem; (b) identification of the "body of knowledge" pertinent to materials handling improvement; (c) through publications and conferences, increasing managerial awareness of the importance of good materials handling to manufacturing effectiveness.

A College Industry Committee for Material Handling Education has been set up accordingly, while the DoI has directed a significant amount of work through the Institute of Materials Handling, which has produced a set of teachers' packages, while a national audio/visual aids centre for teaching and training has been set up through the National Materials Handling centre at Cranfield.

In addition, several publications are available through HMSO, including "Materials Handling—an Introduction," which is the first of a series to include: "Mechanical Handling—a System's Approach, for Senior Managers": "A Guide to Accountancy Practice." and "Movement and Storage of Bulk Solids." There is also MH Costs— A new look at manufacture.

H.D.

Popularity of pallet systems

THE GROWTH of GKN Chep's national pallet pool over the past five years has been so fast it is not surprising that the company is widening its activities both geographically and in terms of products and services.

The company, a subsidiary of GKN (which holds a 70 per cent share) and Brambles Industries of Australia (30 per cent), started operating in 1975 with the aim of winning industry over to the pooled pallet system such as that operated by Brambles in Australia.

Through a network of depots, customer companies are provided with the pallet service which allows them to hire and de-hire the campany's distinctive blue pallets, exchange them with other companies, or have other companies return them to the depot.

This straightforward system, which avoids losses and repair costs for pallets, was immediately popular with industry, particularly the food and drink sectors, where full use could be made of the pallet exchange facility.

As a result, the number of depots has now risen to 17 and around 2m pallets are now in circulation and capital invested, which began at £1m, has now risen to around £10m. Turnover of the company has risen to around £6m a year and this is expected to reach £20m within two years.

The company rightly predicted that growth in the food industry would be fastest, and now estimated that 30 to 35 per cent of the pallets used in that sector are from the pool. However, with around 40 to 50m pallets in use for all purposes in the UK, the company has great potential for expansion and is now making it spresence felt more strongly in other industries. It is adding to the number of its pallets in circulation at the rate of around 450,000 a year.

To meet the demands of its expansion plans, the company has now been split into two divisions, the first dealing with its standard 1,000 by 1,200 mm four-way-entry standard wooden pallets, and half pallets, while the new division is dealing with palelt cages and the new heavy duty containers.

New target

With around 700 clients nationally, including some of the biggest food companies, such as Spillers, Nestle, Tate and Lyle and Brooke Bond Oxo, Chep is now looking for a faster rate of expansion in the engineering industry and its steel heavy duty container is aimed at that market. It is now being used on a trial basis.

The container, also painted blue, is formed out of 3 mm thick steel plate welded on to a 4.5 mm steel base, with a nominal capacity of 1 tonne. They are available in the same way as palets and the system will operate similarly.

Mr. Peter Williams, managing director of the company, sees the motor assembly industry as a prime user of the product, since it is notable for the logistical problems of supply, often among divisions of one company. BL has recently started using the containers, which cost around £70 each to produce and come in two standard sizes. Other clients include Automotive Products, David Brown and Birmid Qualcast.

The intended advantage of the system is that it allows the containers to pass through the production system of one company or division, and then go on to another, where they can be used similarly. Mr. Williams believes that many engineering companies suffer from unnecessarily complicated or inefficient systems of storing and moving parts, which are often expensive in terms of management.

Another problem which often arises is friction between suppliers and customers over the return of containers when they are in short supply, particularly in the case of long-distance dispatches.

"What we want to do is bring order and discipline to what is normally a disorderly procedure," Mr. Williams says. He believes companies will value having a reliable supply of good quality containers.

Chep has also introduced a pallet cage system, which again operates in the same way to provide a purpose-built mesh-sided container for loads which cannot be stacked on pallets, again of particular interest to a wide range of manufacturing industry.

Although they are obviously limited in terms of strength, they fill the gap between the standard pallet and the heavy-duty product, allowing the company to offer some form of product for a very wide range of manufacturing activity.

The company has also worked hard at filling the gaps geographically, and its depots now include two in the south-east, Birmingham, Bristol, two in the East Midlands, Manchester, Carnforth, Leeds, Gateshead, Glasgow, Belfast and two in Ireland.

Expansion

But more significantly, there has been notable expansion within Europe, allowing UK customers to hire in Britain and de-hire in a number of Continental countries. Overall, the system (in various forms of ownership) is operating in Australia, New Zealand, South Africa, Britain, Ireland, Belgium, Holland, Canada and France. Negotiations are now taking place to introduce the system in the U.S.

Chep Europ was established in 1978 as a three-way equal partnership between the industrial investment arm of the Banque Bruxelles Lambert, GKN and Brambles Industries of Australia, and operates the companies in Holland, Belgium and France.

There are now 33 depots in Europe, which include five in the Benelux countries and 11 in France, where full operations have started recently after an investment of £4.5m.

Having moved into profitability after only two years of operation and established a viable base within the food and drink industry, GKN Chep is therefore firmly based for expansion in a number of directions, although always related by the network of pool depots.

Areas of fairly rapid expansion are seen as the chemicals industry, and support industries such as suppliers of containers, bottles, lids and all forms of packaging, where the pallet cage is proving successful.

Mr. Williams claims that the Chep system has provided customers with an average reduction in costs, in relation to the type of product hired, of 30 per cent, while his company is benefitting now from the higher level of activity without great additional capital expenditure.

An early constraint on the company's growth was lack of skilled personnel, who have had to be trained within the company since there is no other choice, but the number employed in the UK has now risen to around 300 and that problem has been largely overcome.

Having successfully achieved phase one of its objective, GKN Chep is now confident that if its new ventures prove equally sound it will be able to invest in even more products and services in the support of industry. Its horizons are clearly wide and if the widespread activities of Brambles in Australia are anything to go by, growth could be rapid.

Lorne Barling

INSIDE CASTRO'S CUBA: By HUGH O'SHAUGHNESSY

Down to one cigar a week

A FORTNIGHT ago the Cuban Government claimed that 5m people, more than half the population of the island, had poured into the streets of cities and towns the length of Cuba to demonstrate in favour of President Fidel Castro and against President Carter. Allowing for some official exaggeration about the numbers and the likelihood that many turned out for fun rather than politics or because they thought it imprudent not to make an appearance, it showed that 21 years after his revolution the Cuban president can command the loyalty or obedience of a large section of the population of his country despite all its present difficulties.

To the outside world the fact that 10,386 people last month voted with their feet and sought to leave Cuba by seeking asylum in the Peruvian Embassy in Havana is intriguing. But it would be unrealistic to forget that President Castro has millions of vociferous supporters on the island. He is also Commander-in-Chief, his younger brother Raul is Defence Minister and executive head of the armed forces and, as far as the visitor can see, there is no organised challenge to this rule. The Cuban Communist Party, after all, is the only authorised political party on the island and the Government keeps a tight control on the media. Marxism-Leninism is the norm.

The debate in Cuba today is not about whether Castro is in danger of being toppled but the subtler one about what is or should be the exact degree of support he can count on.

It is the accepted wisdom among foreign observers in Havana that the Cuban decision to lift the guards from the Peruvian Embassy was taken by President Castro himself in a fit of impatience with goings-on at the mission. A Cuban policeman had been killed by misadventure as Cuban refugees in a bus crashed their way in. Some add that if the Cuban leader had had Sr. Carlos Rafael Rodriguez at his side, he would not have taken such a decision. Sr. Rodriguez, a powerful and astute politician and a vice-president, happened to be on a visit to Moscow at the time. Most agree that the weight of people who swarmed their way under the wing of the Peruvian Government was several times the number that the Cuban Government had expected.

At the same time, it is reported from a number of sources in Havana that President Castro had for some time been preparing an operation which would rid the country of those who were lukewarm or hostile to the revolution.

The public attitude of the Cuban leader is not unlike that of Shakespeare's Henry V before the battle of Agincourt. As Castro continues his two-decade-old battle with the U.S. and in favour of what he sees to be the interests of the developing world, he appears to be saying:

"He which hath no stomach to this fight,
Let him depart; his passport shall be made."

This stance is being backed up by an incessant propaganda campaign which seeks to represent those who want to leave as "scum,"- traitors, the concious or unconcious tools of imperialism and very possibly homosexuals. In its verbal and physical forms, which sometimes involve gangs chasing potential refugees through the streets and roughing them up, it is an unedifying sight which does the Cuban Government no credit.

The deeper political reasoning for allowing Cubans to quit Cuba takes into account the country's ailing economy. Sugar, the principal export, has been severely damaged by disease, as has tobacco, and there has been an outbreak of swine fever.

More worrying still is the fact that the level of productivity is much lower than it should be, although the Soviet Union is supplying raw materials such as oil, and capital equipment to the value of perhaps $3bn a year.

In such an economic atmosphere the possibilities for increased consumption are not good. The ordinary Cuban today enjoys an assured, regular but monotonous diet and adequate health care—things millions of Latin Americans lack. Luxuries are still difficult to come by. But rations for a working adult include 1½ lb of beans a month, 5 lb of rice, six tins of condensed milk, and small allocations of meat, oil and cooking fat. One packet of cigarettes a week is also available on ration, and men are also entitled to one cigar.

The prices of these goods are kept low and stable. Over and above the rationed allocation, extra supplies are often obtainable at much higher prices, from state shops, the black market or the increasing number of markets for rural smallholders' produce.

Whereas the price of a pound of beans on the ration is 18 cents (11p), the black market price is 10 times that. Last Saturday I saw a smallholder selling his beans to an eager crowd of housewives in a Havana suburb at 1 peso 50c (nearly £1).

Extra cigarettes are freely and officially available at three times the ration price of around 40p. The free market and rationed prices of a gallon of petrol are roughly comparable to those of a packet of cigarettes. A Cuban lucky enough to have a private car can expect a ration of about 10 gallons of petrol every month. Food is very often available at workplaces cheaply. The young, the pregnant, nursing mothers and the army get better food.

Clothes and many consumer durables are in greater abundance than they were two years ago. The starting-up of new textile plants has revolutionised women's clothing after the infinitely drab days of the 1970s. Refrigerators and domestic gadgets are often delivered to factories and offices to be allocated to those whom the workforce deems to have been most deserving. With much shipped off to Eastern Europe, citrus fruit is comparatively rare and some claim that the cigar ration has not been honoured in recent months because of the tobacco blight, and consequent cigar shortage.

Housing is the Achilles heel of the Cuban planners with thousands of families having to make do with one room each in cities such as Havana. But rents are low: one Cuban housewife told me her family of three spent no more than £5.40 a month on a tiny flat.

The minimum monthly wage is being raised to 91 pesos (£57.25) but the same housewife commented to me that her husband was bringing in no more than 75 pesos a month.

Though consumption of some items, such as clothing, is rising, the average standard of living cannot compare, for instance, with that of the inhabitants of Miami. And the *average Miamian of Cuban* descent has been an increasingly frequent visitor to Cuba in recent years.

Because the economic gap between the average Cuban and Miamian is so great, it has become imperative for the Castro Government to meet rising expectations at home or allow the discontented Cubans to leave the island.

The process of pushing up productivity and increasing production has meant in recent months several moves to increase incentives to workers on the shop floor, in offices or on the farms. Earlier this month the Government announced with much flourish that smallholders would have facilities to market their privately grown food in Havana, thus copying the peasant markets already widely instituted in Eastern Europe. This could greatly increase the supply of food to the capital while at the same time cutting the ground from under the feet of the black marketeers.

At least as important, higher "responsibility" payments and gradings are being introduced for workers. One journalist told me in Havana: "Now there will be three grades of journalist: A, B and C. With all on one grade, those who really worked, took responsibility, ran the risk of censure when things went wrong, and were dissatisfied when they earned no more than the drifters. Now with the grading system the harder workers will get more recognition. And most important, there will be facilities for demoting some."

When I asked a supermarket manager whether the new incentive systems meant a move away from the goal of achieving Communism he replied: "No, I think it's a good idea. After all they have it in Eastern Europe, don't they?"

At the luxury end of the consumer market the shops selling goods for foreign currency seem to be expanding greatly, presumably absorbing the new flush of dollars coming to Cuba from Cuban exiles and emigrants visiting from Florida.

For instance, while the National shop at the Havana Libre Hotel in the Cuban capital has a small selection of rums and Skanderbeu Albanian cognac, many brands fo whiskies and other Western brews are available for hard currency at the International shop at the other end of the hotel. Outside, having no dollars—only sterling—on me, I was obliged the other day to queue for a local taxi: hire cars are reserved for those with U.S. currency.

But it will be many months before living conditions get *better in Cuba and for the* moment, faced with austerity and one party rule, hundreds of thousands of Cubans obviously want to sacrifice the familiarity of their native land and all their possessions except the clothes they stand up in and opt for exile..

The riots in Miami do not appear to have put off many of those who believe, from their own fading memories of the city or reports of visitors or the constant lure of the U.S. radio, that Florida is carpeted with gold.

Since access to the Peruvian embassy is blocked and those who do choose to emigrate are being subjected to a highly concentrated propaganda campaign, the indications are that the Cuban Government had underestimated the number of those who wanted to leave and is seeking once again to limit the flow of emigrants.

Speculation in Havana puts the number of those who want to quit at around 250,000, say 2½ per cent of the population. Some estimates put the number substantially higher.

It was planned to drain off malcontents and those unreconciled to the revolution so as to leave the island an ideologically purer place. The draining operation is bigger and more far-reaching than the Government perhaps had thought.

The question remains about how much the flight of perhaps hundreds of thousands of refugees will affect the international standing of President Castro in Latin America and the rest of the Third World. The answer may be: not as much as Western observers think.

After all, for many millions in the Third World assured weekly rations of rice and beans at cheap prices and a cigar, however spasmodically delivered, would be a vast improvement on their standards of liging at present. They might not therefore be too easily disposed to criticise a political leader who guarantees his population such a level of consumption.

Speculation in Havana puts the number of those who want to quit Cuba at around 250,000.

Making the celebrated Havana cigar. Disease has damaged the tobacco crop.

Letters to the Editor

Training of technicians

From the Chairman, Technician Education Council

Sir,—The Report of the Central Policy Review Staff on Education, Training and Industrial Performance, is both welcome and timely. It tackles a vital area of our industrial life and points to some decisions that need taking now. I hope that although we as a nation have an ability to talk about the merits of closing stable doors long after all the useful horses have bolted, on this occasion we shall get on with the decisions.

Technician education, for which the Technician Education Council (TEC) is responsible, suffers from the fact that much of the educational establishment, professional institutions and even society itself, regard education as a technician as second best, always inferior to taking a degree course, regardless of whether a particular degree is industrially relevant or not. The current shortage of technicians can only get worse so long as this bias continues. Therefore, I am very glad to see the effort that ministers are putting into supporting TEC in the work of trying to match the education and training of technicians to both current and future industrial needs.

TEC was set up seven years ago by the Government as the responsible national body for technician education in England, Wales and Northern Ireland (Scotland, being different, has SCOTEC). There are now about 140,000 students following more than 2,500 TEC courses in about 450 colleges. From the start TEC decided on innovation and developed schemes of study based on units, or modules, of knowledge and a system of student assessment much akin to that used in the armed forces. With a core of standard units in any particular discipline, other special units can be added and changes readily made to meet the developing needs of an industry or firm. The continuous assessment principle and unit examination rather than total reliance on a "big bang" examination at the end of a course gives more chance of a student being competent. The Certificate that the student gains on completion precisely describes in what areas he or she is qualified. The flexibility of the system enables new technological needs to be met very quickly. The new Micro-electronics units we have recently developed in a few months on the initiative of government and the work now going on in new concepts of industrial design are cases in point.

During all its development work TEC has been carefully negotiating bridges with professional and certificating bodies, the CNAA and universities, so that technicians can have a route through to professional status. However, as the Report points out, with the best will in the world, evolutionary change necessarily takes time. For the future, the pace of change in technology will, I am sure, require TEC to develop distance learning to help in both training of new technicians and re-training throughout a technicians's career.

It may well be that "Open Tech" as has already been proposed would in the end be an essential aid to keeping technicians up to date.

While much has been done, we have yet to deliver the full potential of technician education in this country, and I return to the point that a change is needed in the regard given by the community to vocational careers. The Report's value is that while it points out that governments cannot directly make the changes necessary, there are areas which we should all be thinking about. A most useful contribution has been made by this Report.

H. N. Raine.
76, Portland Place, W1.

Machine tool malaise

From the Secretary, The Machine Tool Trades Association

Sir,—With reference to your recent article "Aid to Machine Tool Industry Criticised" (May 25), and your editorial comment this morning "The Trouble is Lack of Skill" (May 29), we would make the following observations:

To attribute the current malaise affecting certain sectors of the machine tool industry to *a shortage of skills and the* quality of training is not only simplistic in its analysis but is quoting, out of context, the National Institute of Economic and Social Research report on which both your articles are based.

Further, the implication in your comment this morning could lead your readers to believe that the UK machine tool industry operates a training system which in some mysterious way is peculiar to itself, and operated in isolation from the nationally recognised and accepted system of training controlled and monitored by the Engineering Industry Training Board. This, of course, is not the case.

As you rightly point out, the UK machine tool industry "occupies a key place in the manufacturing process." What has not been recognised is the fact that the training given by the machine tool industry is of a very high skill content and is the envy of other UK manufacturing industries.

We concur with your comment that the training system is in need of change, and would add that this association is closely involved in both the review of the 1973 Employment and Training Act and the Finniston Report.

V. W. Slinn,
62, Bayswater Road, W2.

Tin price disagreements

From Mr. G. T. Bodkin

Sir,—In your issue of May 29 you report on the breakdown of negotiations at the UNCTAD Conference to review the current (Fifth) International Tin Agreement.

It seems unfortunate that the country which declined to participate in the first four Agreements since the war is now, as a member of the fifth, set on a course which may bring this particular commodity agreement to an end.

While only partially successful in its objective to achieve tin prices *satisfactory to both* producers and consumers, it has weathered many storms and is certainly more sophisticated in operation than other commodity arrangements which had much shorter lives.

While I can claim no detailed knowledge of current negotiations, the proposed American plan as outlined in your report would introduce a weakness which at the other end of the price range is the defect of all the post-war agreements and which on occasions has rendered the ITC powerless to exercise any effective control.

This defect is the inability to take any further action to influence price levels when the price exceeds the currnt ceilings and the Buffer Stock Manager has exhausted his stock of metal. Hence of course the need for an adequate but not excessive buffer stock as suggested by the mediators from the EEC.

If the Tin Council lost the power to impose export control at or near to the floor price, it is easy to envisage a situation during a depression when all available funds to buy stockpiled tin had been exhausted.

Prior to this happening, it is highly likely that speculative activity would have had the effect of depressing the price even further. Without the *power to impose export control* the ITC would have no cards left to play and the tin industry would be at the mercy of market forces. History has shown that because of its peculiar structure and economic behaviour that situation has not been in the best long-term interest of either producers, processor or consumer. If the U.S. negotiators insist on the elimination of Export Control as a weapon in the council's armoury there need to be two conditions.

First, all sales of U.S. stockpiled tin should be regulated by the ITC, and socedn, the U.S. Treasury should underwrite a supplementary Buffer Stock so that in the event of funds being exhausted interest-free loans are *available to any extent* necessary.

It seems hardly likely that such conditions would be acceptable but it is a logical response to the U.S. request to change fundamentally the nature of the International Tin Agreement.

Geoffrey Bodkin.
Magpie Holt,
High Broom Lane,
Crowborough, Sussex.

EEC Budget tactics

From Mr. J. M. Tennent

Sir,—Surely the British Government is approaching the negotiations with its EEC partners, for an equitable settlement of the "UK Contribution," the wrong way.

It merely antagonises all our partners, the French in particular, for us to be demanding special terms for the UK, however justifiable they may be.

Today it is the UK which is suffering the injustice. But in the years to come it could well be another partner's turn to be at the wrong end of a substantial imbalance.

Psychology plays a major part in all successful negotiations. It would surely pay a handsome dividend in this instance. Accordingly, Britain should *propose the adoption of a new basic* rule to the effect that no EEC member would be required to contribute to the Community Budget, in any year, more than say 105-110 per cent of what it received from the Community Budget in that year. An appropriate "rebate" would be passed (which, conceivably could give rise to a second "rebate" depending upon the incidence of sharing out the cost of the first).

Such a simple new basic rule would automatically take care of inflation and it would put an immediate stop to arguments about whether any present concession for the UK should last for one, three or what number of years. But, above all, it should make all EEC members equally interested since, in the fulness of time, each could benefit therefrom.

J. M. Tennent.
[illegible] Close,
[illegible], Surrey.

Exhaustive measures

From Mr. M. D. McCarthy.

Sir,—Mr. Albery's suggestions (May 28) regarding positioning of exhaust pipes are surely not terribly practical, since there would no doubt be numerous *cases of asphyxiation in traffic* queues, as exhaust would pour into motor-cars, and it would be very difficult to extract.

However, whoy not copy the Americans and have the tail pipes pointing to the ground, thus leaving a great deal of exhaust residue on the road, and not dispersing a fine spray of obnoxious gases directly into the air. This same process may also reduce noise levels, if only slightly, as the road would abosrb some of the sound.

M. D. McCarthy.
Knoll Farm, Daisy Green,
Wickham Skeith, Nr. Eye,
Suffolk.

Politics or prejudice?

Ivor Goodman.

Sir,—Reading recently (May 23) of the comments of Mr. Denis Healey at the national industrial conference of the Electrical and Plumbing Trades Union, I found myself amazed that Mr. Healey felt is necessary to refer to the "half-baked half-understood theories of that Jewish leprechaun Milton Friedman."

Whilst Mr. Healey may feel that the theories of that gentleman are "half-baked and also half-understood," I am unable to find that the cause of rational debate on them is aided by the addition of "Jewish leprechaun." I find the implications in Mr. Healey's comments most distasteful, and am caused to wonder whether a former Chancellor of the Exchequer and possible future Prime Minister is a suitable candidate for any public office if he feels the need to attack the religion of those who do not share his opinions.

Whilst I have not, like many others, agred with the opinions of Mr. Healey, I have always managed to confine my comments to criticism of the policy and not the man. Is Mr. Healey really capable of skilful diplomacy if he is unable to do the same.

Ivor Goodman,
Jaytee House,
Enfield Street,
Leeds.

Today's Events

GENERAL

U.K.: Post Office Engineering Union conference opens, Blackpool (to June 7).

Bakers, Food and Allied Workers annual conference opens, Skegness (to June 4).

Mr. Peter Matthews, Chief Constable of Surrey, chairs Major Disaster Symposium, Olympia.

Lord McGregor of Durris, Advertising Standards Authority chairman, speaks at Advertising Association lunch, London.

Sir Peter Gadsden, Lord Mayor of London, attends Royal Warrant Holders' Association lunch, Dorchester Hotel; attends Consolidated Goldfields reception, 49 Moorgate; dines with Distillers Company, Mansion House.

International T.T. motorcycle races, Isle of Man (to June 6).

International Materials Handling Exhibition opens, NEC, Birmingham (to June 7).

British hospitals and medical exhibition opens, Olympia, (to June 6).

International drop forgers convention opens, London (to June 12).

Coil winding international exhibition opens, Brighton Centre (to June 4).

Overseas: Pope John Paul addresses United Nations Educational, Scientific and Cultural Organisation, Paris.

Financial Times two-day conference on world banking opens, Singapore.

President Valery Giscard d'Estaing of France starts two-day official visit to Finland.

Mr. Saburo Okita, Japanese Foreign Minister, on official visit to Jordan, meets King Hussein and Mr. Sharif Abdel-Hamid Sharaf, Prime Minister, in Amman, to discuss bilateral economic co-operation.

International conference looking into abortive U.S. raid to free hostages, Tehran (to June 5).

PARLIAMENTARY BUSINESS

House of Commons: Finance Bill, committee stage.

House of Lords: Alexandra Park and Palace Bill, third reading. Social Security (No. 2) Bill, second reading. Debate on the Government's policy on the Moscow Olympic Games.

COMPANY MEETINGS

See Financial Diary on Page 25.

Sears hopes for retail lift later this year

THE CURRENT year is likely to be harder than the last one, warns Mr. Leonard Sainer, chairman of Sears Holdings, in his annual statement. But he hopes the final outcome will be helped by an increase in retailing activity later in the period and an improved position in the engineering division.

It is too early to predict the outcome and so much of the result is dependent on the retailing sector in the last quarter. However, he is confident of the long term future of the group as a whole and its ability to grow and prosper.

The group is financially sound and will use the temporary lull to consolidate its position for the next stage of development. The policy to expand overseas continues but, apart from small acquisitions, no suitable business has yet been found.

Pre-tax profits for the year to January 31, 1980, were marginally higher at £92.78m (£92.04m), as known.

The chairman says the cost of operating major department stores causes the group especial concern at present, particularly the additional fixed costs such as general rates which are increasing at alarming rates.

There are indications that demand for the group's fashion merchandise is rising. However, while consumer spending is held back trading is bound to be increasingly difficult and operating expenses are being reduced in line with the level of business attained.

Wallis Fashion Group, acquired in January, suffered a sharp downturn in demand in 1979/80 and it will be some time before a full recovery can be effected, the chairman says.

On the footwear retailing and manufacturing side, he says there are signs of some price resistance but leather prices have steadied. This means the rise in leather footwear prices should moderate, at least in the short-term.

The engineering division incured trading losses of £6.01m last year, against profits of £0.38m, but he hopes it will start to show improved results with new policies and changes in management.

Group current assets were up from £301.01m to £359.31m at the year-end, of which short-term deposits and cash totalled £52.91m (£51.26m). Current liabilities were higher at £212.7m (£164.43m), including bank overdrafts up from £7.95m to £13.3m.

Working capital increased by £19.79m (£25.34m) during the year.

The auditors, Price Waterhouse, again point out that the group's bases of stating stocks and work in progress represent departures from SSAP 9.

Meeting, Selfridge Hotel, W, on June 24 at noon.

BOARD MEETINGS

The following companies have notified dates of Board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether dividends are interims or finals and the subdivisions shown below are based mainly on last year's timetable.

TODAY

Interims: Marley, Martin, The Newsagent.

Finals—Percy Bilton, Century Oils, East Midland Allied Press, Frank G. Gates, Govett European Trust, Marlborough Property.

FUTURE DATES

Interims—

Grootvlei Proprietary Mines ... June 13
Hardy and Hansons ... June 26
Marievale Cons. Mines ... June 13

Finals—

Bishop's Stores ... June 6
Finlay (James) ... June 12
Ocean Wilsons ... June 10
Property Holding & Invest. Tst. July 1
Wigfall (Henry) ... June 5

FT Share Information

The following securities have been added to the Share Information Service appearing in the Financial Times:—

Canadian Pacific Enterprises (Section: Canadians). Double Eagle Energy and Resources (Oil and Gas). English Assoc. of Amer. Bond and Share Holders (Trusts — Finance, Land). Lionel Corporation Americans). Warrior Resources (Oil and Gas). Yorklyde Limited (Textiles).

Duncan and Goodricke questioned

SHAREHOLDERS subjected the chairman of Walter Duncan and Goodricke to a barrage of questions at the lengthy annual meeting. One shareholder also pressed the company to appoint a non-executive director because of alleged conflicts of interest in the group's complex shareholding structure. The chairman, Mr. Michael Butterwick, said he did not think it would be in the company's best interests to do so.

The same private shareholder asked why 1978 had been extensively restated in the 1979 accounts. The chairman said it was "quite normal for adjustments, from time to time, to be made" and the company's new chief accountant, Mr. P. M. Travers, added that he considered some of the entries in the 1978 accounts were "wrong."

Among many other questions, the shareholder asked why the company gave no details of its property holdings and why no market valuation had been placed on a major warehouse in Banbury. Other shareholders also urged the company to place a value on the warehouse. A representative of the company's auditors, Ernst and Whinney, replied that the directors had considerable leeway in deciding whether or not to revalue properties.

The shareholder referred repeatedly to the interests of Mr. G. Fox, a director, in the group. Mr. Fox, who has a substantial interest in Walter Duncan through a company called Camelia Investments, told the shareholder: "I don't feel that I have to discuss my family affairs with you."

Shareholders voted overwhelmingly in favour of all resolutions at the meeting.

Davenport Knitwear

Profits of Davenport Knitwear for 1979 rose from £700,297 to £807,371, before a tax charge of £463,844 (£350,971).

At the interim stage the pre-tax figure was £77,000 higher at £344,000.

Dividend for the year is raised from 4.355p to 4.9p.

EXETER BUILDING

Shares of Exeter Building and Construction Group rose to 128p last week in dealings under rule 163 (2) of the Stock Exchange. Last Wednesday, stockbrokers Milton Mortimer placed 5,500 existing shares and 49,560 new shares, about 10 per cent of the total capital, with their clients and institutions at 126p a share.

SPAIN

1980 High	1980 Low		May 30 Price %
228	203	Banco Bilbao	210
258	217	Banco Central	238
220	203	Banco Exterior	210
228	200	Banco Hispano	209
137	122	Banco Ind. Cat.	122
175	141	Banco Madrid	141
274	237	Banco Santander	257
190	140	Banco Urquijo	150
238	208	Banco Vizcaya	219
209	200	Banco Zaragoza	200
106	75	Dragados	82
62	58	Espanola Zinc	61
61.2	53.2	Fecsa	61.2
40	24	Gal. Preciados	26.5
66.5	58.7	Hidrola	66.5
83	57.5	Iberduero	61.5
120	100.7	Petroleos	114
73	59	Petroliber	61
115	107	Sogefisa	107
57	51.5	Telefonica	54
67.5	58.2	Union Elect.	67

50p sale offer puts £11m tag on S. W. Consolidated

BY PAUL CHEESERIGHT

South West Consolidated Minerals, the wholly owned subsidiary of Dundonian, is offering 5.5m shares for sale at 50p each. The proceeds of £2.75m will be used for mineral exploration and development in south west England.

This is thought to be the first significant metals exploration share offer this century. It will place 25 per cent of SWCM in public hands and give the company a market valuation of £11m.

The issue is being underwritten by Rowe Rudd, the London stockbrokers making the offer, as far as 4.4m shares are concerned. Dundonian itself is underwriting the remainder. Application list opens on June 5.

The prospectus shows that SWCM has entered a joint venture with Amex, the diversified U.S. group which is already engaged on an exploration project outside Plymouth with Hemerdon Mining and Smelting. But this applies to only part of the SWCM properties.

SWCM has exploration licences for 3,200 acres near Callington in Cornwall and for a further 90 acres near Gunnislake, a few miles further east. The licences cover areas of known mineralisation and there were operating mines in the area until the late-19th century.

According to Robertson Research International, the consultants supervising exploration and testing, results so far suggest inferred ore reserves of 2m tonnes with the potential for greater tonnages. Ore grades have been working out at more than 1 per cent tin and tungsten with quantities of silver.

But exploration work so far has not provided sufficient or precise enough information to state that mines will be developed. It is this uncertainty which makes the share offer speculative and explains why trading will be carried out under Stock Exchange Rule 163 (3).

A decision on production from at least some part of the Callington property would be made within two years, according to Mr. Max Lewinsohn, the Dundonian chairman.

On the most optimistic reckoning the Callington property could support three mines, one of them in the Amax joint venture area, producing around 3,000 tonnes a year with a breakeven point of about £5,000 a tonne, or £2,500 less than prevailing market levels. Such production would be roughly equal to the combined output of the two main producing Cornish tin mines, South Crofty and Geevor.

So far about £1m has been spent on exploration and the funds raised by the share offer will be sufficient to finance SWCM's work on its exclusive part of the property. The joint venture with Amax provides for the latter to meet all exploration costs in return for a 50 per cent interest.

A decision to mine on the joint venture part of the property would mean either that both companies contribute equally to the capital costs or that SWCM would call on Amax to meet all expenses, in which case its share would be diluted to 15 per cent.

If mines are developed at Callington, then SWCM may need to raise capital of £12m-£15m, in which case it might return to the market with another share offer.

Lex, Back Page

D. M. LANCASTER

Dealings in the shares of D. M. Lancaster are to begin today on the Stock Exchange following completion of a reverse takeover by tour operator, Club 18-30. The shares of the textile company were suspended last November when negotiations with Club 18-30 began.

Club 18-30 made a pre-tax profit of £172,618 in 1979, on turnover of £4.7m. Lancaster's figures were £15,000 and £187,000 respectively. Following the takeover, capital consisted of 9.84m 5p shares.

Turriff looks for more growth

ALTHOUGH Mr. W. G. Turriff, chairman of Turriff Corporation feels it is too early to provide any reasonable indication of the profit out-turn for 1980, he hopes the group will be able to achieve a further improvement.

He says in his annual review that overall the domestic order book is greater than at the same time in 1979, but capacity in certain sectors is still under-employed, particularly in the engineering and pipeline section, "although there are hopes of an upturn in the remainder of the year."

In general, conditions are very competitive, he states, but the service, plant hire and property interests should do well.

Overseas activity is at a low ebb: "We continue to bid for selected projects in which we have particular expertise only to be outbid by uneconomic margins," he explains.

As reported on May 1, taxable profits picked up in the second half and for the whole of 1979 totalled £1.37m against £1.23m. The dividend is increased 29 per cent to 3.75p (2.9065p) net per share.

Balance sheet shows net current assets of £3.73m (£2.89m) and an increase in net liquid funds of £131,000 (£1.28m). Chairman's emoluments amounted to £37,370 (£21,420).

Meeting, Warwick, June 26 at 3 pm.

Fairey to make new forecast before Pearson completes

COMPLETION OF S. Pearson and Son's £24m purchase of Fairey Holdings from the National Enterprise Board has been delayed while Fairey management makes a new forecast of current year profits.

"A few points of detail still have to be settled," Mr. J. P. Medd, chairman of Doulton and Co., the Pearson subsidiary making the purchase, said yesterday. "But we still hope to complete it by the end of June."

When the takeover was announced on May 1, the completion was expected to be in mid-May.

Mr. Medd confirmed that "the most significant detail" still to be settled was the outlook for Fairey's profit this year. Concerned by signs of deterioration in the engineering industry, Doulton asked Fairey managers in mid-May for confirmation of their 1980 profit forecast which was one of the factors on which Doulton's offer was based.

"They said they thought it would be better to go back and do a proper one," Mr. Medd stated. "It would be fair to say that we would be nearer completion if they had not decided to produce a new forecast."

Asked if Doulton might withdraw its offer if the forecast is pessimistic, he said, "I don't know. If the whole thing is a disaster, we would have to rethink our position. If the change is minor, we would go ahead."

Fairey's profits declined marginally in 1979 to £5.1m on turnover of £43.9m. Mr. Medd said none of the other details that remained to be settled seemed to pose any major problem.

The NEB accepted Doulton's offer in preference to lower bids made by a consortium led by Hambros Bank. As in the case of the NEB's current attempt to sell its 50 per cent interest in Ferranti, there have been suggestions that the NEB's interest in getting top price on the Fairey sale conflicted with Fairey directors' desire to remain independent rather than be bought by a single group.

Fairey said yesterday it was not involved in the negotiations going on between the NEB and Doulton and was unaware of any problems that had arisen.

CLIFFORD'S DAIRIES

Following the rights issue by Clifford's Dairies of 2,431,603 "A" non-voting ordinary shares at 66p, applications have been received in respect of 2,297,988, or 94.5 per cent.

GUINNESS PEAT AVIATION

Air Canada has acquired a 29.3 per cent holding in Guinness Peat Aviation, the Shannon-based aircraft leasing and financing company. As a result, Air Canada, Aer Lingus and the Guinness Peat Group will each have an equal holding in GPA, with the balance being held by Mr. Tony Ryan, managing director of GPA.

Air Canada's total investment is £3.7m, of which £1.54m has been subscribed for a new issue of shares in GPA, and the balance has been applied to the purchase of shares previously held by Aer Lingus, the Guinness Peat Group and Mr. Ryan.

ELLIS & EVERARD ACQUISITION

Ellis and Everard has acquired the capital of Anstead (Holdings) for £700,000 to be satisfied by 525,000 ordinary shares and £112,000 cash.

In the year to November 30, 1979, Anstead made pre-tax profits of £176,000, giving net assets at that date of £538,700. Profits are warranted to continue at this level for the current year and a scale of bonuses and penalties has been incorporated in the agreement.

Anstead, with its subsidiaries, D. F. Anstead, Rosanne Products and Bongers de Rath, specialises in the supply, manufacture and distribution of colours and high quality speciality chemicals for the food, pharmaceutical and cosmetic industries.

POCHIN'S

Pochin's has agreed for the acquisition of assets and goodwill only of the concrete pumping division of Tilcon for £220,000 cash, plus spare parts at agreed valuation.

CORAL INDEX: Close 414-419 (−1)

M. J. H. Nightingale & Co. Limited

27/28 Lovat Lane London EC3R 8EB Telephone 01-621 1212

£000's capitalisatn.	Company	Last price	Change on week	Gross Div (p)	Yield %	P/E
3,469	Airsprung	60	−4	6.7	11.2	3.5†
850	Armitage and Rhodes	34	—	3.8	11.2	2.2†
8,554	Bardon Hill	280	+5	13.8	4.9	8.2†
780	County Cars 10.7% Pf.	78	—	15.3	19.6	—
6,420	Deborah Ord.	93	—	5.0	5.4	10.2
4,574	Frank Horsell	122	−3	7.9	6.5	7.6
13,869	Frederick Parker	96	−4	12.8	13.3	4.4†
2,214	George Blair	104	−1	16.5	15.9	—†
1,825	Jackson Group	73	—	6.0	8.2	2.8†
14,492	James Burrough	105	−1	7.2	6.9	9.2
3,060	Robert Jenkins	300	+5	31.3	10.4	9.9†
3,462	Torday	225	—	14.3	6.4	5.9†
2,671	Twinlock Ord.	12½	−0½	0.8	6.7	2.4†
2,020	Twinlock 12% ULS	74	+2	12.0	16.2	—
6,266	Unilock Holdings	48	+1	2.6	5.4	10.2
990	Unilock Holdings New	45	—	—	—	9.6
11,622	Walter Alexander	92	+1	4.4	4.7	6.1
4,901	W. S. Yeates	210	+2	12.1	5.8	3.4†

† Accounts prepared under provisions of SSAP 15.

CONTRACTS AND TENDERS

INTERNATIONAL CAPITAL MARKETS

INTERNATIONAL BONDS BY FRANCIS GHILES

Attention switches to D-Mark yields

LETHARGY spread through all sectors of the international bond market towards the end of last week. This mood was far more pronounced in the dollar sector than in the others, notably the foreign Deutsche Mark sector, where the volume of new issuing activity remains high.

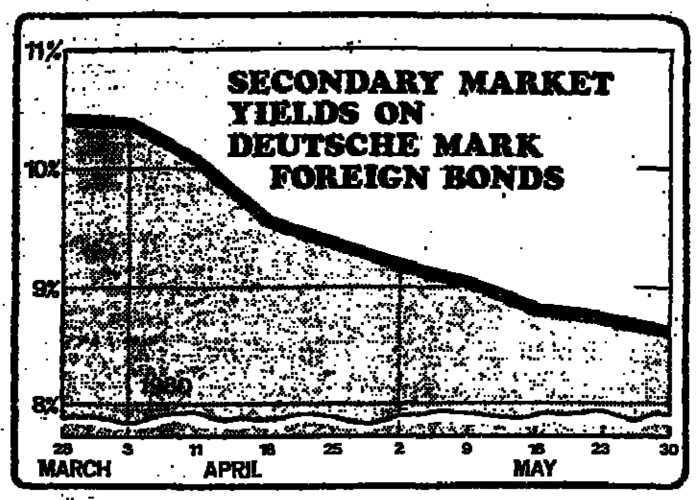
Two new Yankee issues were announced, one for the Kingdom of Sweden and the other for the EIB, and there were only two new Eurodollar issues: a $200m seven-year note for ENEL, the Italian electricity utility, the first tranche of which was completed before Easter and a $100m 12-year straight bond for Hydro Quebec. An issue for Pemex is expected to be launched tonight.

Trading was active on Tuesday after the Whitsun recess but prices came off the boil on Wednesday following the lead of the U.S. domestic market. Nothing much happened for the rest of the week and there appears to be little loose paper around. Issues which fared badly when they first reached the market continue to see their prices improve as they find their way into firmer hands.

The consensus is that prices are most unlikely to fall much further, even if one allows for some more profit taking. The yield curve remains positive despite the hardening of Eurodollar rates last week—the six-month rate moved up ⅜ per cent to 10⁵⁄₁₆ per cent.

At the same time investors are under much less pressure to invest: they have, after all, bought $3.35bn worth of new paper since Easter and seem quite content at present to roll over their deposits and certificates of deposit.

Another factor is also at play, as Kidder Peabody's Weekly Telex to investors points out: "As dollar bond prices surged, other markets became proportionately more attractive. Analysts watched is amazement as the three-month Eurodollar rate fell to 9⅜ per cent against 9⁷⁄₁₆ per cent for comparable maturity D-Mark deposits." With inflation in West Germany expected to be contained at 5 per cent, half the expected level in the U.S., some investors are naturally asking whether the historically low yield differential of just 200 basis points between U.S. Government bonds and prime grade D-Mark issues reflects the reality of the situation.



All the new issues denominated in D-Marks were well recieved last week, whether the terms were tight as in the case of the 8¼ per cent private placement for Austria or whether the borrower was, as in the case of Brazil, of less than prime quality. The tight money policy being conducted by the Bundesbank is helping to keep interest rates high. Were they to drop a rush into D-Mark foreign and domestic bonds can be expected. Yields on both foreign and domestic D-Mark bonds continues to fall meanwhile as the buying pressure, not least from abroad, continues. Thus yields of below 8 per cent are forecast by some banks in the next week or so. Another feature of the D-Mark bond market at present is that the yields obtainable on foreign and domestic bonds are roughly in line.

The German Capital Markets Sub-Committee did not meet for its monthly meeting last week, in part because the volume of new D-Mark issues agreed to in recent months has rarely corresponded with the amount of paper eventually issued. But a steady stream of new bonds can be expected if the current favourable conditions continue.

The first sterling denominated floating rate note issue, for Scandinavian Bank, met with a lukewarm reception when it reached the secondary market last week: among the reasons given by dealers is the fact that the borrower, a consortium bank, is not well known by investors, a minimum coupon which was too low (9½ per cent) and the narrowness of the sterling sector in general.

CURRENT INTERNATIONAL BOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Lead manager	Offer yield %
U.S. DOLLARS							
‡†Banco Centrale de Costa Rica	50	1985	5	6¼Φ	100	EBC, BNP	6.606Φ
‡†National Bk of Hungary	50	1985	5	5¼Φ	100	Amex Bank, KIIC	5.833Φ
‡Roylease (g'teed Royal Bank of Canada)	50	1985	5	11¼	100	Royal Bank of Canada	11.250
‡†ENEL	200	1987	7	5¼Φ	100	Societe Generale	5.319Φ
††Kingdom of Sweden	100	1990	10	*	*	Salomon Bros.	*
††Kingdom of Sweden	100	2000	13.09	*	*	Salomon Bros.	*
††EIB	100	1988	8	*	*	Merrill Lynch	*
††EIB	100	2000	13	*	*	Merrill Lynch	*
‡Hydro-Quebec	100	1992	9.15	11½	100	S. G. Warburg, CSFB	11.500
D-MARKS							
‡**¶Hazama Gumi (g'teed Dai-Ichi Kangyo Bk)	40	1985	5	8¾	100	Bayerische Vereinsbank	9.000
‡Republic of Brazil	150	1988	8	9¼	99½	Deutsche Bank	9.342
‡¶World Bank	150	1988	8	8½	99½	Deutsche Bank	8.589
‡**Republic of Austria	50	1986	6	8¼	100	Bayerische Hypotheken Bank	8.250
‡**Republic of Austria	50	1988	8	8¼	100	Bayerische Hypotheken Bank	8.250
‡**Republic of Austria	50	1990	10	8¼	100	Bayerische Hypotheken Bank	8.250
SWISS FRANCS							
‡RENFE (g'teed Spain)	80	1990	—	6½	100½	SBC	6.431
‡FGH Hypothekbank	50	1990	—	6	100½	Banque Gutzwiller	5.932
‡Tauern Autobahn (g'teed Austria)	20	1990	—	5¾	99¾	Wirtschaft und Privatbank	5.784
‡**§Nitto Boseki	30	1985	—	6	100	Banca del Gottardo	6.000
Asian Development Bk	60	1990	—	6¼	100	Credit Suisse	6.250
‡**§Sharp Corp.	100	1985	—	5¾	100	Credit Suisse	5.750
LUXEMBOURG FRANCS							
Swedish Investment Bk	500	1988	6½	11¼	100	Kredietbank (L'bourg)	11.250
AUSTRIAN SCHILLINGS							
‖§§Oesterreichische Kontrbk.	500	1985	5	9⅜	100	Orion, S. G. Warburg	9.375

* Not yet priced. ‡ Final terms. ** Placement. † Floating rate note. Φ Minimum. § Convertible. †† Registered with U.S. Securities and Exchange Commission. ¶ Purchase Fund. ‖ Cancelled. §§ Transaction currency U.S. dollars.
Note: Yields are calculated on AIBD basis.

CREDITS BY PETER MONTAGNON

Fine terms for Spanish utility

THE SPANISH utility, Enher, has succeeded in obtaining ten-year money from international banks at a margin of only ⅝ per cent throughout. According to Mr. Miguel Geijo, its finance director, verbal agreement was reached late last week on a $75m mandate on this basis with Lloyds Bank International and Continental Illinois.

These terms are softer for the borrower than those on the last Spanish credit, a $160m borrowing by the state railways, Renfe, which also carried a ⅝ per cent margin but had a life of only eight years. The market has also recently seen a $350m credit for subsidiaries of the state holding company, INI, which had a widely syndicated $290m tranche with a split ⅝-⅞ per cent margin over eight years.

Both these credits met strong demand from international banks, prompted by a shortage of quality borrowing in the medium-term credit markets. The 10-year maturity on the current deal thus raises the question as to whether terms are now actually softening for Spain.

In short, the answer from many international bankers is "no." After a brief flirtation with Spain in recent weeks, the credit market is now increasingly inclined to caution in view of the deterioration in the balance of payments, a domestic liquidity squeeze and a growing public sector budget deficit, all of which could prompt greater recourse to international markets by Spanish borrowers.

The bankers are thus resisting the idea of seeing the Enher borrowing as a benchmark deal, though its progress in the market will be closely scrutinised. Enher is one of the best rated utilities in the INI group.

Czechoslovakia, meanwhile, is discreetly raising $200m over seven years at a margin of ⅝ per cent through a group of European banks. Banks involved are seeking to avoid publicity because the issue of lending to Eastern Europe remains sensitive after East Germany's Intrac had to shelve a $150m to $200m credit last month.

As expected Poland failed to reach agreement with its bankers on a $500m credit by its self-imposed May 28 deadline. Negotiations are continuing as the banks wait to see what sort of economic and financial information the borrower is prepared to provide to back up its request.

The lack of good quality information has been one of the main stumbling blocks in the negotiations. It is understood that Poland has agreed to provide more details on its short-term debt and some information on its long-term debt and reserves, though it is unlikely that this will be enough to permit bankers a detailed insight into the country's foreign exchange cash-flow.

Poland also seems unlikely to apply for membership of the IMF despite recommendations to this effect from Mr. Philip Klutznick, the U.S. Commerce Secretary. This is regretted by many bankers who feel that membership would result in a more open flow of information and also enable Poland to obtain IMF credit supported by an agreed economic stabilisation programme.

Progress has, however, been made with the joint borrowing by three Yugoslav banks, Jugobanka, Stopanskabanka and Investicionabanka Titograd. The amount has been set at $107m over seven years with a spread of 1¼ throughout. By the end of last week the deal was substantially underwritten on a club basis by several banks including Bankers Trust, Bank of America, Chase Manhattan, Citicorp and Manufacturers Hanover.

A $75m, seven-year credit with a margin of ⅞ per cent throughout was signed last week for Italy's Cofiri. This is the first Euromarket borrowing by the Istituto per la Ricostruzione Industriale group member. The transaction was led by Hill Samuel, Bayerische Landesbank Girozentrale, Lloyds Bank International and Banque Europeenne de Credit.

In the corporate sector, Cie Francaise des Petroles has arranged a $25m five-year revolving credit facility at a ⅝ per cent margin over Libor through the National Bank of Abu Dhabi.

Euromarket tops a trillion, Page 32

US. BONDS BY IAN HARGREAVES

Market defies Fed rate cut

THE FEDERAL Reserve last week cut the discount rate and the credit markets barely managed a nod to acknowledge the fact. Although in marked contrast to the dramatic consequences of the upward move in the rate earlier this year, the lack of response was not surprising.

Not only had the move been long forecast but the Fed's, even at its new level of 12 per cent, is still well above market rates. No bank, other than in distress, is likely to be borrowing from the Fed at this stage.

The falling discount rate was joined by the falling prime, which came down from 14½ to 14 per cent during the week. Just as not too many banks are borrowing at the discount rate, it seems that not too many prime quality borrowers are borrowing at the prime. With commercial paper rates still under 9 per cent, it is hard to see why big corporations should wish to do so. The prime and discount are also misleading, because in the last week they have been moving in the opposite direction to virtually every other interest rate.

Rates on three-months Treasury bills have, in a week shortened by the Memorial Day holiday on Monday, edged from 7.50 to 7.90 per cent. Similarly, in the bond market, prices have slipped, taking the yield on the long Treasury bonds up about 30 basis points on the week.

Although miniscule in comparison with recent falls, these gains, and the fact that the market reacted with some surprise when the Fed in mid-week allowed the Federal funds rate to trade about 10.5 per cent without intervention, suggest that the halt to the avalanche of falling rates could be durable. The fact that rates continued to firm on Friday in spite of the fact that the Government reported the sharpest monthly drop on record in the leading economic indicators (they were down 4.8 per cent) strengthens this impression.

The sense of caution has been greatly enhanced by the quite extraordinary volume of corporate funding now entering the market, which is running almost at a rate of $2bn a week. Latest estimates for May are $6.3bn — more than three times last year's monthly average.

The market also has on its mind the fact that a Treasury caught up in one of its periodic impasses with Congress over extension of debt ceilings has had to put off over $7bn of financing. As a result the Treasury announced late on Friday that it would hit the market with $16bn of requirements this week.

The name of the Fed's game, as well as that of the Administration, continues to be one of trying to insure against too long and severe a recession, while maintaining control of the monetary aggregates. At present the Fed is anxiously cranking at the money supply, trying to regrow it back into line with its targets. M1-B was up $1bn on Friday, but such moderate growth is nowhere near sufficient to reverse the recent 5.9 per cent rate of quarterly decline. Non-monetarist economists meanwhile are warning with unashamed satisfaction that the Fed may find it extremely difficult to turn on the tap of money supply, having tried to turn it off only three months ago.

President Carter, meanwhile, is on the campaign trail telling audiences that the tide has turned in the country's battle for economic regeneration. This week's unemployment figures will make that message harder to swallow in many parts of the country.

U.S. INTEREST RATES (%)

	Week to May 30	Week to May 23
3-month Treasury Bill	7.90	7.55
3-mnth. comcl. paper	8.13	8.00
Federal Funds weekly average	10.82	9.81
Treas. 30-year bond	10.41	10.31
Lng-term AAA utility	11.25	11.13
Lng-term AA indstrl.	11.02	11.00

Source: Salomon Bros. estimates.

FT INTERNATIONAL BOND SERVICE

U.S. DOLLAR STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

OTHER STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

DEUTSCHE MARK STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

FLOATING RATE NOTES	Spread	Bid	Offer	C.dte	C.cpn	C.yld
[illegible]						

SWISS FRANC STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

CONVERTIBLE BONDS	Cnv. date	Cnv. price	Bid	Offer	Chg. day	Prem
[illegible]						

YEN STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

BONDTRADE INDEX AND YIELD

	Medium term		Long term	
May 30 ...	92.26	10.07	81.72	11.04
May 23 ...	91.56	10.36	81.05	11.17
High '80 ...	92.26 (30/5)		89.19 (2/1)	
Low '80 ...	86.32 (2/4)		71.54 (29/2)	

EUROBOND TURNOVER (nominal value in $m)

	Cedel	Euroclear
U.S. $ bonds		
Last week	1,217.5	2,962.0
Previous week ...	1,117.6	4,103.2
Other bonds		
Last week	165.9	281.9
Previous week ...	299.3	404.1

* No information available—previous day's price.

† Only one market maker supplied a price.

STRAIGHT BONDS: The yield is the yield to redemption of the mid-price; the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week=Change over price a week earlier.

FLOATING RATE NOTES: Denominated in dollars unless otherwise indicated. Coupon shown is minimum. C.dte=Date next coupon becomes effective. Spread=Margin above six-month offered rate (‡ three-month; § above mean rate) for U.S. dollars. C.cpn=The current coupon. C.yld=The current yield.

CONVERTIBLE BONDS: Denominated in dollars unless otherwise indicated. Chg. day=Change on day. Cnv. date=First date for conversion into shares. Cnv. price=Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem=Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

The list shows the 200 latest international bonds for which an adequate secondary market exists. The prices over the past week were supplied by: Arab Company for Trading Securities SAK; Kredietbank NV; Credit Commercial de France; Credit Lyonnais; Commerzbank AG; Deutsche Bank AG; Westdeutsche Landesbank Girozentrale; Banque Internationale Luxembourg; Kredietbank Luxembourg; Algemene Bank Nederland NV; Pierson, Heldring and Pierson; Credit Suisse/Swiss Credit Bank; Union Bank of Switzerland; Akroyd and Smithers; Bankers Trust International; Bondtrade; Credit Commercial de France (Secs.) London; Citicorp International Bank; Daiwa Europe NV; Deltec Trading Company; Dillon, Read, Overseas Corporation; EBC; First Chicago; Goldman Sachs International Corporation; Hambros Bank; IBJ International; Kidder Peabody International; Merrill Lynch; Morgan Stanley International; Nesbitt Thomson; Orion Bank; Salomon Brothers International; Samuel Montagu and Co.; Scandinavian Bank; Strauss Turnbull and Co.; Sumitomo Finance International; S. G. Warburg and Co.; Wood Gundy.

Closing prices on May 30

WORLD STOCK MARKETS

NEW YORK

[illegible]

CANADA

[illegible]

HOLLAND

[illegible]

HONG KONG

[illegible]

JAPAN

[illegible]

ITALY

[illegible]

NORWAY

[illegible]

SWEDEN

[illegible]

SWITZERLAND

[illegible]

FRANCE

[illegible]

AUSTRALIA

[illegible]

SOUTH AFRICA

[illegible]

Financial Rand US$0.93½ (Discount of 24½%)

BRAZIL

[illegible]

TEL AVIV

[illegible]

AUSTRIA

[illegible]

BELGIUM/LUXEMBOURG

[illegible]

GERMANY

[illegible]

DENMARK

[illegible]

SINGAPORE

[illegible]

Indices

NEW YORK —DOW JONES

	May 30	May 29	May 28	May 27	May 23	May 22	1980 High	1980 Low	Since C'mpila'n High	Since C'mpila'n Low
◆ Industr'ls	850.85	846.25	850.32	857.76	854.10	842.92	903.84 (13/2)	759.13 (21/4)	1051.70 (11/73)	41.22 (2/7/32)
H'me B'nds	72.55	72.58	72.38	72.82	72.28	72.27	74.81 (9/1)	65.87 (28/3)	—	—
Transport	269.23	268.14	271.20	268.69	265.34	263.91	305.80 (8/2)	233.69 (27/3)	305.80 (8/2/80)	12.23 (8/7/32)
Utilities	110.29	109.31	110.49	108.8	109.15	108.19	113.46 (13/2)	98.84 (27/3)	163.32 (20/4/69)	10.52 (28/4/42)
Trading Vol 000's	34,829	42,000	38,580	48,619	45,790	41,840	—	—	—	—

◆ Day's high 853.24 low 835.07

	May 23	May 16	May 9	Year ago (approx
Ind. div. yield %	7.10	6.60	6.50	6.01

STANDARD AND POORS

	May 30	May 29	May 28	May 27	May 23	May 22	1980 High	1980 Low	Since Cmpil't'n High	Since Cmpil't'n Low
‡Indust'ls	125.86	123.82	126.83	125.24	124.36	122.58	134.47 (13/2)	111.09 (27/7)	134.64 (11/1/73)	3.52 (30/6/32)
§Composite	111.24	110.27	112.06	111.40	110.62	109.01	118.44 (13/2)	98.22 (13.2)	125.85 (11/1/73)	4.40 (1/6/32)

	May 28	May 21	May 14	Year ago (approx)
Ind. div. yield %	5.30	5.53	5.58	5.38
Ind. P/E Ratio	7.77	7.46	7.38	8.38
Long Gov. Bond Yield	10.15	10.26	10.19	8.98

N.Y.S.E. ALL COMMON

May 30	May 29	May 28	May 27	1980 High	1980 Low
63.44	62.97	63.88	63.50	67.77 (13/2)	55.30 (27/3)

Rises and Falls

	May 30	May 29	May 28
Issues Traded	1,865	1,881	1,917
Rises	825	505	827
Falls	623	1,053	679
Unchanged	417	324	411
New Highs	—	32	33
New Lows	—	4	2

MONTREAL

	May 30	May 29	May 28	May 27	1980 High	1980 Low
Industrial	357.79	363.84	363.41	361.72	423.89 (29/2)	325.21 (27/3)
Combined	335.07	331.36	339.68	340.16	378.90 (29/2)	298.90 (27/3)
TORONTO: Composite	1971.7	1956.8	1997.2	2006.6	2192.5 (29/2)	1702.5 (27/3)

NEW YORK ACTIVE STOCKS

Friday	Stocks traded	Closing price	Change on day		Stocks traded	Closing price	Change on day
Gulf West	522,900	17	+1⅛	Gulf Oil	336,400	42¾	+2
City Invest.	461,500	25⅞	+ ⅞	Benguet	354,500	9⅞	+ ⅞
IBM	437,200	55⅞	+ ⅞	El Paso Co.	330,500	19¾	+ ⅝
Engelhard	412,000	34½	+3⅛	IU Intl.	323,300	16½	+ ⅛
Schering - Plough	406,600	38½	+ ⅛	Exxon	319,200	64	+ ⅛

	May 30	May 29	May 28	May 27	1980 High	1980 Low
AUSTRALIA						
Sydney All Ord. (1958/59)	857.06	858.54	858.80	851.68	947.47 (14/2)	760.88 (2/1)
Metals & Minls (1956/59)	5338.49	5378.75	5401.88	5361.14	6680.85 (14/2)	4581.25 (28/3)
AUSTRIA						
Credit Aktien (2/1/62)	68.49	68.56	68.60	68.62	69.40 (7/1)	67.40 (2/5)
BELGIUM						
Belgian SE (31/12/63)	96.76	95.88	95.68	96.14	105.75 (11/2)	93.14 (31/3)
DENMARK						
Copenhagen SE (1.1/73)	79.16	78.18	78.19	77.77	86.74 (2/1)	74.75 (6/3)
FRANCE						
CAC General (29/12/61)	109.0	109.8	109.9	110.2	117.80 (22/2)	97.1 (8/1)
Ind Tendance (28/12/79)	105.9	106.0	106.5	107.1	109.70 (13/2)	95.60 (3/1)
GERMANY						
FAZ-Aktien 31/12/58	226.21	227.07	225.46	225.79	238.99 (26/2)	212.73 (28/3)
Commerzbank (Dec. 1953)	708.60	718.9	709.8	705.0	749.2 (25/2)	667.0 (27/3)
HOLLAND						
ANP-CBS General (1970)	84.5	84.7	84.8	83.9	87.8 (11/2)	74.0 (27/3)
ANP-CBS Indust. (1970)	66.0	65.7	65.4	64.9	68.2 (11/1)	58.2 (28/3)
HONG KONG						
Hang Seng Bank (31/7/64)	894.32	888.45	884.98	876.54	955.17 (15/2)	758.9 (18/3)
ITALY						
Banca Comm. Ital (1972)	97.69	98.65	96.57	96.54	97.66 (30/5)	83.11 (2/1)
JAPAN						
Dow Average (16/5/49)	6856.79	6841.49	6849.95	6825.58	6894.81 (25/4)	6475.93 (27/3)
Tokyo New SE (4/1/68)	466.48	468.50	467.36	466.89	472.65 (14/2)	449.01 (10/3)
NORWAY						
Oslo SE (1/1/72)	131.52	133.55	133.88	132.50	144.78 (14/2)	119.12 (28/3)
SINGAPORE						
Straits Times (1966)	520.21	516.88	(c)	516.80	520.21 (30/5)	428.75 (3/1)
SOUTH AFRICA						
Gold (1958)	825.6	808.3	615.3	594.1	825.6 (30/5)	586.0 (4/3)
Industrial (1958)	528.1	526.5	528.1	527.4	529.1 (28/5)	468.8 (29/1)
SPAIN						
Madrid SE (28/12/79)	97.44	97.17	97.88	96.68	105.28 (21/2)	85.76 (13/5)
SWEDEN						
Jacobson & P. (1/1/58)	367.18	364.48	365.20	365.99	388.98 (8/2)	334.72 (17/1)
SWITZERLAND						
Swiss Bank Co. (31/12/58)	292.4	294.1	295.4	296.2	317.9 (11/2)	284.5 (22/4)
WORLD						
Capital Intl. (1/1/70)	—	156.3	157.9	157.8	148.3 (13/2)	120.6 (27/3)

Base values of all indices are 100 except NYSE All Common—50; Standard and Poors—10; and Toronto—1,000; the last named based on 1975. † Excluding bonds. ‡ 400 Industrials. § 400 Industrials plus 40 Utilities, 40 Financials and 20 Transports. c Closed. u Unavailable.

Spanish prices: Page 16

NOTES—Prices on this page are as quoted on the individual exchanges and are last traded prices. [illegible]

These particulars have been prepared for the purpose of giving information to the public with regard to South West Consolidated Minerals Limited ("SWCM"). The Directors of SWCM and Dundonian Limited ("Dundonian") have taken all reasonable care to ensure that the facts stated herein are true and accurate in all material respects and that there are no other material facts the omission of which would make misleading any statement herein, whether of fact or of opinion. All the Directors of SWCM and Dundonian accept responsibility accordingly.

There is no listing on any stock exchange for the shares of SWCM and application is not being made to any stock exchange for a listing for any part of SWCM's capital. Application will be made for the shares of SWCM to be dealt in on The Stock Exchange under the provisions of Rule 163(3). SWCM has entered into a Sponsorship Agreement with Rowe Rudd & Co. whereunder it has agreed, inter alia, to apply for the admission of its share capital to the Official List when it is able to meet the requirements for listing. Persons wishing to deal in the Ordinary shares of SWCM in accordance with Rule 163(3) should consult their stockbroker or other professional adviser in the normal manner.

Two copies of this Prospectus, having attached thereto the documents referred to herein, have been delivered to the Registrar of Companies for registration.

South West Consolidated Minerals Limited

(Incorporated in England under the Companies Acts 1948 to 1967 No. 1234982)

SWCM

A COMPANY CARRYING OUT AN EXTENSIVE PROGRAMME OF MINERAL EXPLORATION IN CORNWALL WHICH MAY LEAD TO THE DEVELOPMENT OF MAJOR NEW MINES PRODUCING IN THE MAIN TIN, TUNGSTEN AND SILVER.

OFFER FOR SALE by ROWE RUDD & CO. of

5,500,000 Ordinary Shares of 10p each in SWCM fully paid, at 50p per share

The procedure for application and an Application Form are set out below.

The Application List for the Ordinary Shares now offered for sale will open at 10.00 a.m. on 5th June, 1980 and may be closed at any time thereafter.

Investment in a mineral exploration company such as SWCM is speculative. The section headed "Risk Factors" contained within this document should be carefully considered.

Share Capital

Authorised	Issued or to be issued fully paid
£3,000,000 in 30,000,000 Ordinary Shares of 10p each	£2,400,000 in 24,000,000 Ordinary Shares of 10p each

Indebtedness

At the close of business on 23rd May, 1980 apart from £440,549 owed to Dundonian, SWCM had outstanding no mortgages, charges, debentures or other loan capital or other borrowings or indebtedness in the nature of borrowings including bank overdrafts and liabilities under acceptances (other than normal trade bills) or acceptance credits hire purchase commitments, guarantees or other material contingent liabilities.

Board of Directors

Max Robert Lewinsohn, F.C.A., A.T.I.I. *(Chairman)*,
Downs House, Brighton Road, Banstead, Surrey.

Gerald Crosland Pengilly, M.B.E., A.C.S.M., C. Eng., F.I.M.M., *(Managing Director)*,
"Reef Cot", 30 Forth-an-Nance, Portreath, Nr. Redruth, Cornwall

Donald George Neville, LL.B.,
De Tillens, High Street, Limpsfield, Surrey

Ronald William Potts, T.D., J.P.,
Metheral, Tredethy, Bodmin, Cornwall

Richard Michael McNeil Williams, F.C.A.,
Hazelhurst Farm, Strood Green, Wisborough Green, Sussex.

Company Secretary and Registered Office
Malcolm Roger Smith, F.C.A.,
3 Katharine Street, Croydon CR0 1NX

Geological and Mining Consultants
Robertson Research International Limited,
Ty'n-y-Coed, Llanrhos, Llandudno, Gwynedd, North Wales LL30 1SA

Stockbrokers
Rowe Rudd & Co.,
63 London Wall, London EC2M 5UQ

Bankers
National Westminster Bank Limited,
41 Lothbury, London EC2P 2BP

Receiving Bankers
The Royal Bank of Scotland Limited,
New Issues Department, 62 Lombard Street, London, EC3P 3DE

Solicitors
Nabarro Nathanson,
76 Jermyn Street, London SW1Y 6NR

Auditors and Reporting Accountants
Berke Cohen Fine & Partners, Chartered Accountants,
14 John Princes Street, London W1M 9HB

Registrars
The Royal Bank of Scotland Limited,
31 St. Andrew Square, Edinburgh EH2 2AB

AN APPLICATION FORM IS PRINTED AT THE END OF THIS PROSPECTUS. COPIES OF THE OFFER FOR SALE AND ADDITIONAL APPLICATION FORMS MAY BE OBTAINED FROM:

Rowe Rudd & Co., 63 London Wall, LONDON EC2M 5UQ.	**The Royal Bank of Scotland Limited,** New Issues Department, 62 Lombard Street, LONDON EC3P 3DE.
National Westminster Bank Limited, St. Andrew's Cross, PLYMOUTH PL4 0AE.	**The Royal Bank of Scotland Limited,** Registrars Department, 31 St. Andrew Square, EDINBURGH EH2 2AB.
Dundonian Limited, Downs House, Brighton Road, Banstead, SURREY SM7 1DE.	**South West Consolidated Minerals Limited,** Tredethy, Bodmin, CORNWALL PL30 4QS.

The following is a copy of a letter to Rowe Rudd & Co., from Mr. Max Lewinsohn, Chairman of South West Consolidated Minerals Limited:

Downs House,
Brighton Road,
Banstead,
Surrey SM7 1DE

30th May, 1980

Gentlemen,

In connection with your Offer for Sale of Ordinary Shares in South West Consolidated Minerals Limited ("SWCM") *I have pleasure in providing you with the following information*:—

Introduction

SWCM (formerly Nottsvale Limited) was incorporated on 23rd November, 1975, and in February, 1976 licences were acquired to explore and mine a large area of known tin mineralisation totalling some 13 sq. km. near Callington in Cornwall. During March 1977 Dundonian Limited ("Dundonian") completed the acquisition of the entire issued share capital of SWCM, and subsequently in June 1977 SWCM negotiated a small additional licence area (about 1 sq. km.) to explore and mine near Gunnislake in Devon, four miles from the principal area at Callington.

From the outset the objective has been to explore the areas and, if justified, to promote the development of a profitable new mining venture, thereby contributing to the revival of Cornish tin mining and benefiting the economy through the development of the nation's mineral resources. Accordingly, in the summer of 1977 an exploration programme was started under the supervision of Robertson Research International Limited ("RRI"), Geological and Mining Consultants.

Geological interpretation and exploration results to date have been encouraging, and potential now exists which could lead to the development of three large new mines, producing in the main tin, tungsten and silver. However, before full scale production is started further drilling and feasibility work is necessary, which would include underground development, metallurgical testwork and pilot plant operations.

The Board of Dundonian considers that SWCM provides a good opportunity to participate in UK mineral exploration. Consequently, arrangements have been made to offer Dundonian shareholders and employees, and the public an opportunity to acquire a minority stake in SWCM's share capital. The raising of new capital in this way will enable SWCM to explore and complete feasibility work at two of the three areas of prime interest, and will help SWCM to develop as an independent mining company. To explore and complete feasibility work as appropriate at the third area of prime interest, SWCM has concluded a joint venture arrangement with Amax Exploration of U.K. Inc. ("Amax") under which Amax will bear the future costs.

SWCM has an authorised share capital of 30,000,000 Ordinary Shares of 10p each of which 5,500,000 are now being offered for sale at 50p each fully paid. As a result the total issued share capital of SWCM will be increased to 24,000,000 Ordinary Shares of 10p each, and Dundonian's interest will then represent 75 per cent. of the shares in issue. It is Dundonian's intention to retain this holding, and to continue to support SWCM in the exploration and development of its Cornish mining interests.

Exploration and Mining Licences

The location and extent of SWCM's licences is shown on Figures 1 and 2. The principal terms of the licences allow SWCM to explore for a period of years on payment of a fixed annual fee, with the option of taking up a further licence including the right to mine on payment of annual royalties based on production but subject to a small minimum annual fee which merges with royalties. Relevant details are as follows:—

Location	Approximate Area (Acres)	Exploration Period (years)	Licence Fee	Mining Period (years)	Annual Royalty on Net Smelter Return (%)
Callington Area Redmoor Mine, Blogsters Plantation and Hayes South	3,100	8 years to November 1983	£10,000 p.a.	42 years to November 2025	3.33
Silver Valley	100	11 years to August 1985	£5,000 (single payment)	42 years to August 2027	3.33
Gunnislake Area	80	4 years to June 1981	£250 p.a.	42 years to June 2023	3.33

In the Gunnislake areas SWCM has experienced difficulty in renewing one licence and negotiating new licences with mineral owners to explore the full extent of the vein structures and the projected extensions to the east. Accordingly SWCM has taken action to protect its interests and applications have been made with a view to obtaining additional licences under the Mines (Working Facilities and Support) Acts 1966 and 1974.

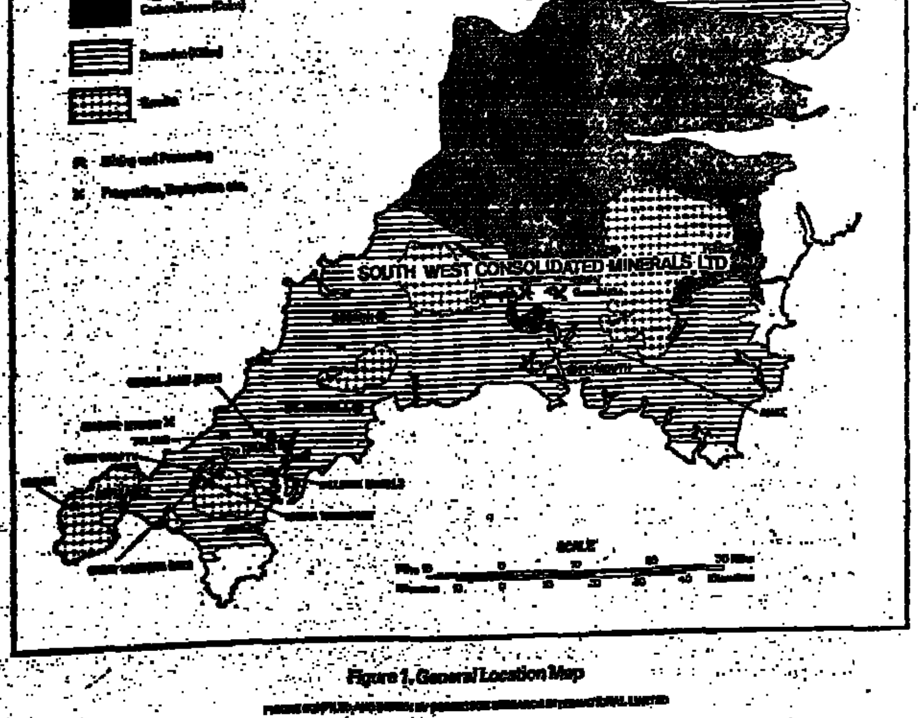


Figure 1. General Location Map

SWCM is considering the desirability of extending its mineral interests in the Callington area, and discussions are taking place with certain mineral owners which may lead to the grant of licences over adjoining land. *There is some uncertainty as to the title of a small part of the mineral rights in the Callington area*, but this is not likely to have any material effect on future operations. In addition SWCM owns approximately 12 acres of freehold land at Callington which may be required in connection with the future production and treatment of ore in the area.

Mining History

Tin has been mined in Cornwall since Roman times, but underground mining only started in medieval times when rich tin-bearing veins were found near the surface and worked from shallow pits. At the beginning of the eighteenth century mining for copper commenced, and activity reached a peak in the mid-nineteenth century when south-west England was the world centre of base metal production. During this period an important discovery was made of a tin zone beneath a copper zone at Dolcoath mine, which subsequently resulted in it becoming Cornwall's deepest and richest tin mine. Similar discoveries were made elsewhere and Cornwall soon became internationally renowned for its deep lode tin mining.

Towards the end of the nineteenth century large deposits of copper and tin, capable of low cost extraction, were discovered abroad. Base metal prices fell and many Cornish mines were forced to close as they had insufficient capital to withstand losses. In the case of the mines in the Callington area this event occurred just when capital was most needed to deepen the shafts and improve the plant, to treat tin instead of copper as the zoning changed at depth in common with other Cornish mines.

An additional problem at these mines was the presence of tungsten intermixed with tin. In those days tungsten had no commercial value and was difficult to separate from tin, which often resulted in heavy penalties being incurred on the sale of mixed ore. Such veins were, therefore, never worked with enthusiasm and were if possible left in situ. These difficulties proved to be too great a burden for the mines in the Callington area and they were forced to close in the 1890's.

In recent years the strength of base metal prices, the general political uncertainties abroad, and the heavy infrastructure requirements in developing countries have combined to focus attention on south-west England again. Apart from the old well established operations, SWCM and a number of major mining groups, are now actively engaged in exploration in the area (Figure 1).

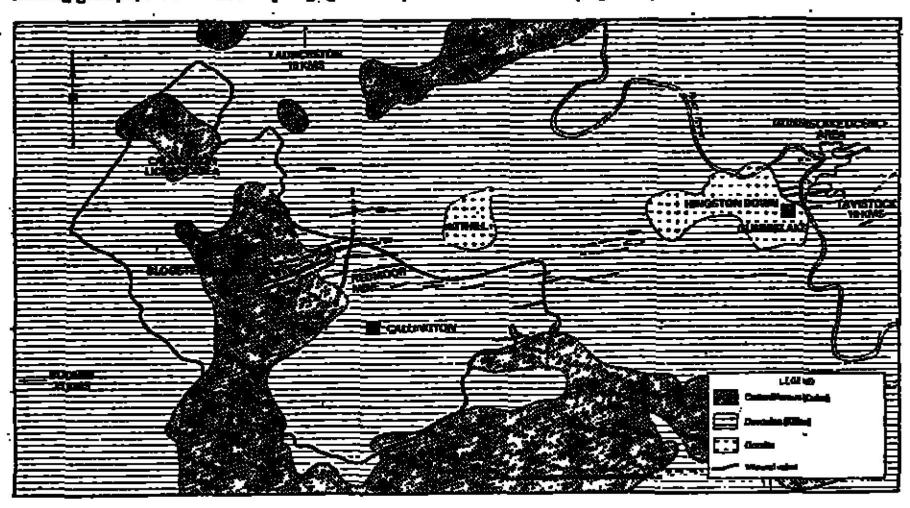


Figure 2. Licence Areas and Local Geology

FIGURE COMPILED AND DRAWN BY ROBERTSON RESEARCH INTERNATIONAL LIMITED

Recent Exploration

Prior to RRI involvement SWCM's areas had been investigated by several parties, including the *Non-Ferrous Mineral Control during the period 1939-1945*, Mackay and Schnellmann Limited in 1963, Dr. C. H. James, ARSM, DIC, BSc, PhD, FIMM in 1965, and C. T. Sweet, ACSM, C.Eng, FIMM in 1967. Following the acquisition of the licences by SWCM a thorough assessment of the prospects was undertaken by RRI, and in the summer of 1977 an extensive programme of exploration was started under RRI supervision. There follows a copy of the Report from RRI, which covers the exploration programme and results to date.

Ty'n-y-Coed,
Llanrhos,
Llandudno,
Gwynedd,
North Wales
LL30 1SA.

30th May, 1980.

To: Rowe Rudd & Co., and
The Directors,
South West Consolidated Minerals Limited,

Gentlemen,

In accordance with your instructions we have prepared the report below on the programme of exploration carried out under our supervision since 1977 at the mining prospects of South West Consolidated Minerals Limited (SWCM), in south-west England (Figure 1).

Introduction

In 1977 Robertson Research International Limited (RRI) was requested to carry out a preliminary evaluation of the tin-tungsten potential of two mining prospects held by SWCM near Callington in Cornwall and Gunnislake in Devon, extending in area to approximately 13 sq. km. and 1 sq. km. respectively (Figure 2). Normally in south-west England mineral rights exist in small segregated holdings historically difficult to amalgamate into worthwhile exploration and development areas. The existence of approximately 13 sq. km. at Callington already amalgamated into one area is a valuable factor in itself, particularly in view of the area's past mining history in the 19th and early 20th century.

Previous to our investigations the potential of the area had been emphasised by reports from several sources, the most important being the Non-Ferrous Mineral Control during the period 1939-1945. Wartime investigations, prompted by an accelerated demand for minerals, were active in the licence areas and were concentrated on proving reserves in and around old workings. Active mining operations may well have resumed had the urgent requirement for minerals not ceased with the end of the War.

Following a review of the regional and local geology, old mining records and past reports, RRI outlined a series of exploration targets consisting of both previously known vein deposits, and a number of new prospects in the Callington area which had no previous history of mining. Postulation of these new lodes was based on geological deduction and the presence of strong tin anomalies which had been located during reconnaissance soil sampling in the mid-sixties. The orientation and geochemical characteristics of these anomalies suggested the existence of a series of tin bearing east-west veins hitherto undiscovered.

An exploration strategy was formulated to investigate the new prospects and to provide information on extensions of mineralisation around several known deposits. A phased approach was adopted in which low-cost exploration techniques were applied to a wide area, anomalies were highlighted and targets worthy of exploration by more refined, higher-cost methods were identified. Thus at Callington, the areas defined as anomalous in the mid-sixties by surface reconnaissance geochemistry were sampled down to bedrock by auger drilling, and where significant values were confirmed, deeper testing was carried out by percussion drilling to depths of 50m. Several of the targets identified by this approach have been further investigated by diamond drilling to depths of 150m. In addition, at Gunnislake a programme of mine rehabilitation followed by geological mapping, channel sampling and an underground diamond drilling programme has been completed.

Exploration to date has produced encouraging results confirming the discovery of a series of undeveloped tin veins striking east-west in addition to the known lodes at Callington, and has confirmed a level of proven reserves at Gunnislake with every likelihood of both vertical and horizontal extensions present.

Geology and Mineralisation

South-west England is formed of three main rock groups; Devonian (killas), Carboniferous (culm), and granitic intrusions. Major granitic intrusions lie in a more or less easterly trending belt, from Lands End to Dartmoor. Evidence points to these isolated granite bodies being one continuous body at depth connected by a series of buried granitic 'ridges', high points of which are represented by intermediately located smaller intrusions. Tin, tungsten and copper mineralisation, located in veins cutting through granite and killas, shows a close spatial relationship to the granitic intrusions.

The regional distribution of economic deposits of mineralisation shows a more specific relationship to high points within the overall granite structures and to the buried intermediate ridges, where a greater intensity of fracturing within the surrounding rocks has enhanced vein development. The mineral licence areas lie approximately halfway between the Bodmin Moor and Dartmoor granites, adjacent to the Kit Hill and Hingston Down intrusives, and thus in an optimum site from a structural viewpoint for vein development. The presence of abundant mineralisation in the area is evident from the ubiquitous presence of old mine workings throughout the region which were established on accessible and easily identified vein structures.

Callington Area

By virtue of its size, the Callington area is best divided into three sub-regions for consideration. Exploration results to date suggest that each of these sub-regions could develop into major mining areas in their own right.

1. Redmoor Mine (Figure 3)

For much of the last century Redmoor was one of the centres of Cornish mining, supporting a number of independent mines producing copper, tin, lead and silver. Most production dwindled during the 1890's in the wake of low metal prices (following the discovery of large scale tin and copper deposits abroad), and the difficulty of separating out tungsten (of no commercial value in those days) which was intermixed with tin at depth.

The area contains at least fourteen east-west trending tin and copper veins which are intersected in the west by a major north-south crosscourse carrying lead and silver. Historical records show that veins were worked over an average strike length of some 500m, but to a depth of only 200m, which suggests that the mines were just reaching the principal tin zone at the time of their closure. In common with other areas in Cornwall, it seems that the vein structure consists of a copper zone near surface, passing down through a copper-tin zone to a tin-rich zone at depth.

Prior to RRI involvement a thorough assessment of past records and a programme of underground sampling was carried out by a Cornish mining engineer, Mr. C. Sweet, ACSM, C. Eng, FIMM. His work indicated that some 200,000 tonnes of tin and tungsten mineralisation remain in the vicinity of the old workings within 250m of the surface, with every likelihood of substantial additional tonnages of ore at greater depth. Average grades of 1.6 per cent. cassiterite plus 0.85 per cent. wolframite were calculated during this assessment.

In particular, there is the prospect of enriched mineralisation at a depth of about 300m where two of the major lodes in the area, Johnson's Lode and Great South Tin Lode, may intersect. These lodes, which are 1–2m and 3m in width respectively, run parallel in an east-west direction but dip beneath surface towards each other.

At Redmoor a strike length of 500m with multiple veins and economic grades within 200m of surface is known from past mining activity. Elsewhere in Cornwall tin has been mined successfully at depths of 1,000m. If deeper drilling here confirms the continuation of the lodes with similar grades of ore, the ultimate potential reserves could be several million tonnes.

2. Blogsters Plantation (Figure 3)

This area extends from the lead-silver crosscourse at Redmoor west to Blogsters and beyond, a distance of about 1,500m over a width of 400m. The target is the westerly extension of the group of lodes worked at Redmoor immediately to the east of the crosscourse. It is believed that the east-west tin lodes have been displaced by the crosscourse, and that to the west the lodes are down-thrown and displaced southwards.

To test this potential an extensive programme of auger sampling and percussion drilling has been carried out, and a limited programme of diamond drilling was recently completed. The percussion drilling generated 315 samples from 28 holes which were analysed for tin, tungsten, copper, lead, silver, zinc and arsenic. Having identified significant tin, silver and zinc mineralisation, seven diamond drillholes were completed at intervals along a strike length of 1,200m to test the structure up to depths of approximately 150m.

All of the diamond drillholes intersected mineralisation associated generally with elvan dykes which again trend in an east-west direction. In several of these, multiple zones of mineralisation were intersected with the best values obtained as follows:—

—0·76 per cent. tin and almost an ounce of silver over a width of 2·55m.
—1·42 per cent. tin, 2·13 per cent. zinc and more than an ounce of silver over a width of 1m.
—0·32 per cent. tin, 7·9 per cent. zinc, 0·2 per cent. copper and almost an ounce of silver over a width of 1·2m.

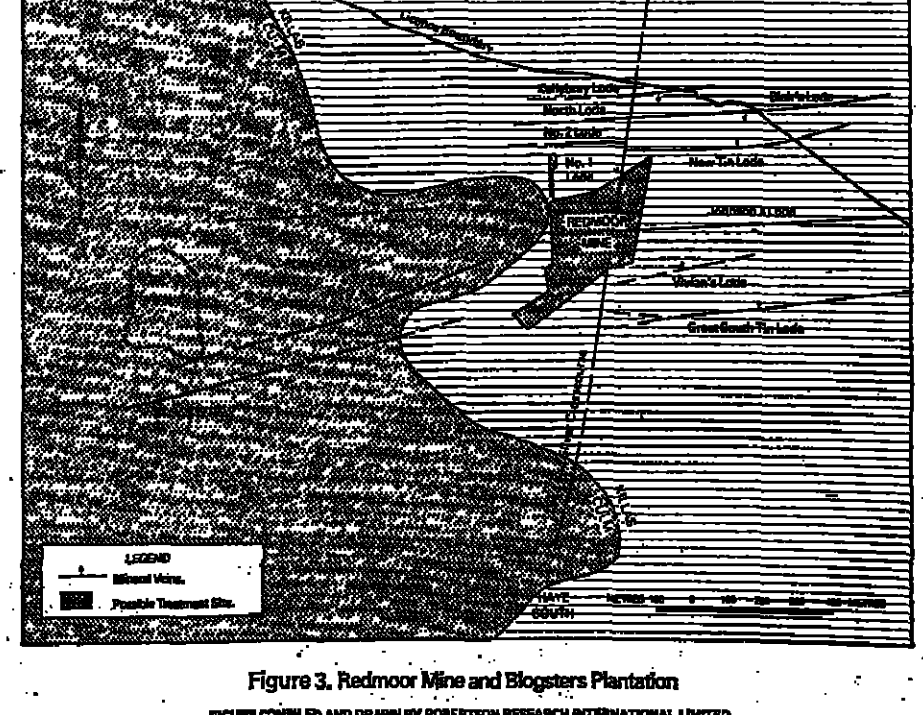


Figure 3. Redmoor Mine and Blogsters Plantation

FIGURE COMPILED AND DRAWN BY ROBERTSON RESEARCH INTERNATIONAL LIMITED

Exploration results have therefore confirmed the presence of a series of undeveloped tin bearing structures associated with elvan dykes trending east-west throughout the area. There is every reason to believe that the mineralised structures persist in depth. In common with most Cornish lodes the grades of ore vary considerably, and further drilling will be required to predict the overall tin grade. However, the results to date are compatible with the view that a tin grade of 1 per cent. over a width of about 1m may be obtained, with high zinc, copper and silver values also present.

The mineralised structures have been identified over a strike length of 1,200m and to a depth of approximately 150m, which gives inferred reserves in the region of 2 million tonnes. If further drilling proves that the mineralisation persists at greater depths then the ultimate reserve potential could be very substantial indeed.

It should be noted that the Blogsters Plantation area contains two additional targets for future exploration:—

1 The presence in the middle of this area of multiple veins at surface could indicate the existence of a granite ridge at depth, raising the possibility of the development of a stockwork vein system in the granite below. Such a system would imply greater volumes of mineralisation, large tonnages and efficient low cost extraction methods.

2 A further major north-south crosscourse which intersects the area to the west of Blogsters could contain lead and silver in a similar manner to the crosscourse at Redmoor. Such a lode could support a low tonnage high grade lead and silver mine.

3 Haye South (Figure 4)

This area lies approximately 1 km. to the south of Redmoor, on the projected extension of the lead-silver crosscourse. *The target was an east-west group of tin-bearing lodes intersecting the crosscourse* with resultant enriched mineralisation as was the case at Redmoor.

To test this potential a programme of auger sampling and percussion drilling was undertaken, followed by diamond drilling in key areas. The percussion drilling generated 87 samples from 8 holes which were analysed in particular for tin, lead, zinc and silver. Five diamond drillholes were completed with samples being taken for analysis at 2m. intervals. Where high metal values were obtained, the core was split longitudinally and analysed in detail.

Exploration results from percussion drilling identified a strongly mineralised structure containing high tin and silver values over a strike length of about 250m. In this case, however, deeper diamond drilling indicated that the mineralisation did not follow the expected pattern of vertical east-west trending tin veins, and confirmed that the mineralisation remained richer close to the surface. Subsequent discussions concerning this area have led to a re-appraisal of exploration results and a new geological interpretation has recently emerged.

It has recently been recognised that low angle thrusting is a feature of the contact between Devonian and Carboniferous rocks in south-west England. Such a sub-horizontal thrust plane would be a highly favourable location for mineralisation, and it is suggested that the mineralisation at Haye South could occupy a series of sub-horizontal fractures running parallel to the contact between the rock types. Careful re-examination of the percussion and diamond drilling results supported this theory with the comparatively high tin and silver values close to surface being correlated well between holes and traverses. The best drill hole encountered more than 0.5 per cent. tin and five ounces of silver over a 3m. intersection (Figure 4).

Mineralised structures of this nature could cover a large part of the Haye South area in view of the rock types present. Confirmation, by extensive drilling, of the sub-horizontal plane of tin and silver mineralisation could lead to the development of a major mine employing low cost extraction methods.

To date only 15 per cent. of the Callington Area has been explored. Whilst outstanding potential exists in the three sub-regions discussed above, there are further good prospects which warrant exploration in due course. These include Silver Valley, Silver Hill, Florence, Prince of Wales, Lady Ashburton and Coombelawn.

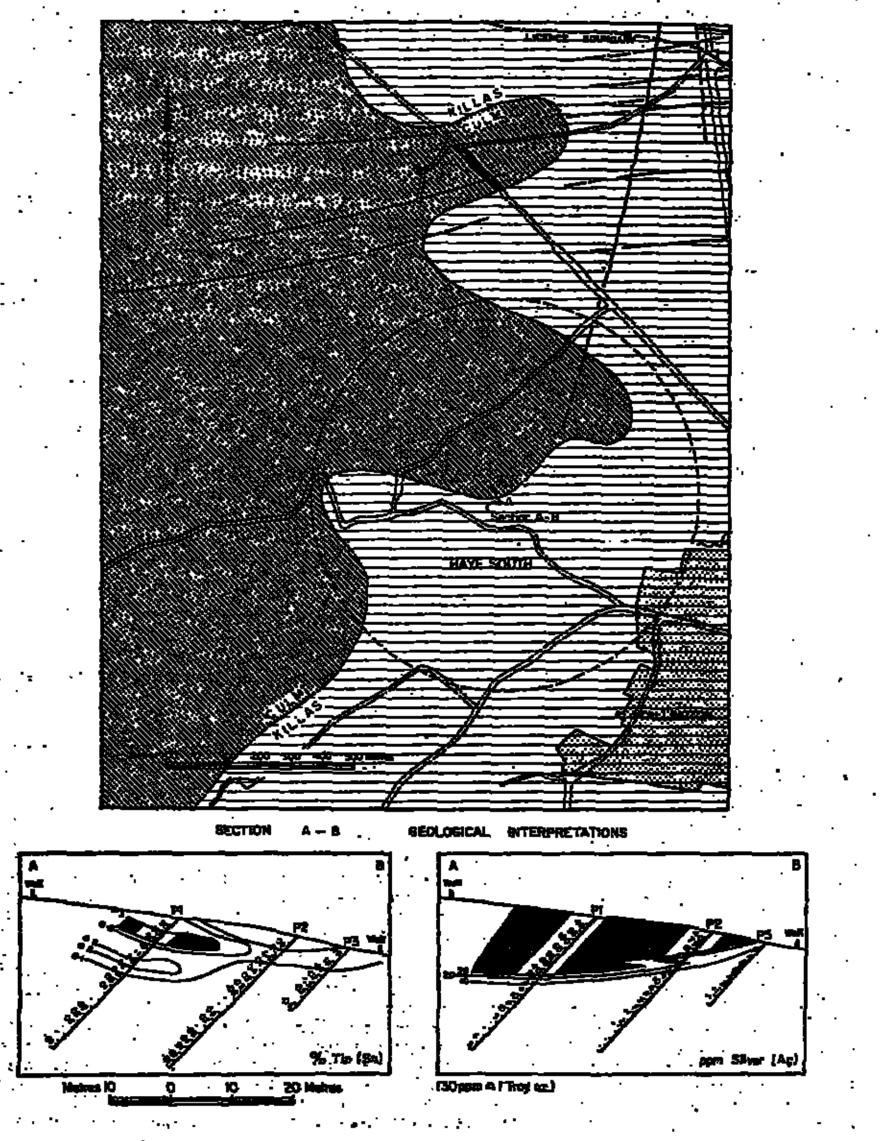


Figure 4. Haye South

FIGURE COMPILED AND DRAWN BY ROBERTSON RESEARCH INTERNATIONAL LIMITED

Gunnislake Area

The Gunnislake area contains at least six vein structures in which tin-tungsten mineralisation is known to exist at combined grades in excess of 1 per cent., and past work has established a modest level *of reserves. These deposits show strong* indications of extensions to the known body of mineralisation, in part capable of exploration by the continuation of presently accessible underground workings. All of the mineralised structures were investigated as far as surface and underground access would permit in the first instance. However, for reasons of cost-effectiveness it was decided to test the potential of the area by concentrating first on one lode, indicative of the sett, with the objective of confirming stated reserves and indicating sufficient extensions to justify a modest mining operation.

To date the mine workings have been rehabilitated, and underground a programme of geological mapping, channel sampling and diamond drilling has been completed. This work has confirmed the level of indicated reserves in the immediate vicinity of the old workings at approximately 37,000 tonnes with a combined tin and tungsten grade of some 1.4 per cent., and inferred reserves of some 80–90,000 tonnes, possibly of a similar grade with extensions at depth most likely. In addition to the work underground, an extensive programme of auger and percussion drilling from surface has been completed. The results have shown that mineralisation extends at least 325 metres to the east of the limit of present mine workings. This mineralisation is *probably contained within an easterly plunging ore-shoot typical of the* region and its presently undetermined lateral extent at depth may be considerable.

Some preliminary mineral processing testwork showed that good recoveries are attainable using conventional gravity and froth flotation techniques. While concentrate grades were low in these preliminary test runs, the overall recovery of values and production of saleable concentrates of tin and *tungsten from the Gunnislake area is expected to be achieved following further detailed testwork.*

Conclusions

The south-west of England has a tradition of mining for tin and base metals, and in SWCM's areas the grades of ore inferred from past work and recent sampling are in excess of 1 per cent. combined tin and tungsten. Grades in certain key areas are yet to be proven, but on present information it appears that production grades after dilution would be commercially viable. In addition, recent drilling has indicated that silver and zinc may well be important products of a successful mining venture.

By its nature and *geology Cornish mining does not lend itself to the proving of large reserves in* advance of operation. For reasons of cost, beyond a certain point, production tends to go hand-in-hand with exploration and development. However, exploration results to date suggest that inferred reserves are in excess of two million tonnes, with the potential for considerably greater tonnages, possibly in the multi-million tonne range, on proving the lateral and depth extensions of known lodes.

The Callington licence is unique by virtue of its size. To date only some 15 per cent. of the area has been explored, but three outstanding prospects have already been identified. Each one of these, Redmoor Mine, Blogsters Plantation and Haye South could develop into a major mine in its own right. Smaller prospects such as Silver Valley, Silver Hill, Gunnislake and others, could provide valuable additional ore for a mine which may be established at any one of the three larger opportunities above.

The interests of SWCM offer the opportunity for possible future development of tin, tungsten, zinc and silver mining operations in a stable political climate. This, together with the existance of an established infrastructure, is worth a great deal in economic terms when compared to the cost of new mine development in overseas tin producing countries such as Nigeria, Malaysia or Bolivia. In these countries the cost of establishing a new mine might well be three or four times more expensive than in south-west England for an equivalent sized operation. Furthermore, from an operating point-of-view, Cornwall has the great advantage of a skilled man-power resource and provides a working environment which is attractive to senior technical management.

Yours faithfully,
ROBERTSON RESEARCH INTERNATIONAL LIMITED
Geological & Mining Consultants

Development Plans

The objective of SWCM is to further explore, develop and bring into early production the several prospects identified by exploration to date. In planning future work it is possible to consider Redmoor Mine and Blogsters Plantation *together because the latter area is on the westerly extension of the former,* and development of the two together may prove to be feasible, working underground from Redmoor and striking towards the west. Haye South, however, requires separate consideration in view of the quite different sub-horizontal nature of the mineralised structure.

At Redmoor and to the west, a phased programme of diamond drilling to depths of approximately 400m. will be completed. The aim is to intersect the main lodes at depth to establish the width of lodes and grades of ore; with the object of proving the much larger potential reserves indicated by RRI. This will be followed, if results so justify, by full feasibility work which will include more underground development, metallurgical testing and pilot plant operations to refine processing techniques.

At Haye South, an extensive programme of regional geochemistry and rotary percussion drilling is planned to test the full lateral extent of the tin and silver mineralisation. Any further encouraging results here will also lead to feasibility work, including further drilling to fully delineate the mineralised structure, *metallurgical testwork to maximise recovery of the minerals present, and pilot plant operations in advance* of full commercial production.

Other areas within the SWCM licences, as yet unexplored, will gradually be covered by regional reconnaissance. Initially blanket soil geochemistry and geophysics will be interpreted in the light of mineral zoning in order to pinpoint further diamond drilling targets

Potential Scale of Operations

The eventual scale of operations cannot be predicted until full feasibility work is well advanced in the licence areas. However, if further exploration proves the potential reserves at Redmoor Mine and *Blogsters Plantation*, it would indicate that *each area may be capable of producing in excess of 800* tonnes of ore per day. Such an operation would be one of the largest underground tin mines in the world, providing the market with substantial quantities of tin metal per annum, plus tungsten, zinc and silver.

Similarly, it is not possible at this stage to predict the potential scale of operations at Haye South. However, *if the lateral extent of the sub-horizontal structure persists over an area of 1 sq. km. (about 8* per cent. of the licence area) with an average width of 5m. then extraction at the rate of 2,000 tonnes per day may be feasible. Depending on grades a large tonnage low cost mine of this nature could also be a major tin and silver producer.

It is clear that the development of one or more major new mines would provide a considerable boost to local employment *with the creation of several hundred new jobs. In addition, production on this* scale would result in substantial benefits to the U.K. economy and provide a significant proportion of the annual tin requirements of British industry.

Financial Considerations

As a result of the Offer for Sale, SWCM considers that it will have sufficient capital to carry out further exploration and feasibility work as appropriate in its licence areas, including the main prospects at Redmoor Mine and Blogsters Plantation but excluding Haye South. Based on the scale of operations contemplated this may cost in the region of £3 million.

To finance the exploration and development at Haye South, which may itself amount to £3 million or more, SWCM has concluded a joint venture arrangement with Amax under which Amax will bear all exploration and feasibility costs in return for a 50 per cent. interest in the Haye South prospect. More details of this agreement are given in the next section.

To encourage mineral exploration the Government has established a scheme of financial assistance for approved projects. It is relevant that to date SWCM's *exploration programme has been approved for* grant purposes under the Mineral Exploration and Investment Grants Act 1972. This entitles SWCM to *claim 35 per cent. of qualifying expenditure*, and it is the intention to continue working under the auspices of this scheme. Subject to certain conditions, grants are generally written off if an exploration project proves abortive, but are repaid over a period of years out of future revenue if a project proves successful.

SWCM estimates that it requires approximately £2 million over the next two years to carry out the planned programme of exploration and development in its licence areas. Feasibility work at Redmoor Mine, Blogsters Plantation and Haye South is estimated to take between two and three years to complete, and thereafter additional capital of £12–15 million may be required to commence production on a commercial scale. At that time SWCM may endeavour to finance such costs by a combination of issuing further share capital and raising term finance from external sources, including possibly U.K. Government or E.E.C. assisted loans. SWCM does not expect to earn significant income from its mining interests until full scale commercial production starts.

Joint Venture Arrangements

SWCM and Amax have agreed to explore, and if appropriate to mine, the Haye South prospect jointly. Several phases of intensive exploration leading to full feasibility are planned, the costs of which will be borne entirely by Amax. In return Amax will earn the right to a 50 per cent. interest in Haye South and the project will be managed with equal representation from both parties. Amax has the right to withdraw prior to the completion of full feasibility work, in which case 100 per cent. of Haye South reverts without cost to SWCM.

Once a decision is taken following feasibility to go into full scale production both parties will contribute equally to meet the capital costs. However, SWCM has the option to require Amax to meet all capital costs, and in these circumstances SWCM's interest in Haye South would be progressively diluted but it cannot fall below a 15 per cent. carried interest in the project. Provision is also made for the mine *to be managed under a joint operating agreement, the terms of which would be finalised by the parties* at the appropriate time.

Future Prospects

Tin, tungsten and zinc are base metals which are vital to modern industry. Silver is a precious metal *widely used in jewellery apart from its industrial applications. The continuing demand for these metals* provides SWCM with a ready market for all its potential output. In the immediate future, therefore SWCM intends to concentrate on bringing the areas into early production.

SWCM plans to develop as an independent mineral resources company, and will from time to time consider other opportunities should the terms and prospects appear attractive. At present RRI are *investigating a number of other areas for SWCM* which are mainly in Wales and south-west England and which were actively mined for gold many years ago. The aim is to establish whether any of these areas may be commercially viable in the light of the prevailing gold price. SWCM has no rights in these areas at present, but if encouraging results are obtained it will endeavour to negotiate suitable licences with the Crown.

Proceeds of the Offer for Sale

The proceeds of the issue will amount to £2,750,000 out of which the expenses of the issue totalling approximately *£230,000 will be paid. Further amounts from the proceeds will be applied to meet exploration and development expenditure in the Callington and Gunnislake areas over the next two to three years. Funds not immediately committed to the exploration programme will be invested for the* benefit of SWCM to increase the total resources available for future exploration and development.

Directors and Management

Max Robert Lewinsohn, FCA, ATII, aged 33 is the Chairman of SWCM. He is a Chartered Accountant and *Principal of The Maximillian Partnership, Chartered Accountants. He was appointed* Chairman in 1977, and is also Chairman of Dundonian, the parent company of SWCM. He is a member of the Cornish Chamber of Mines and has been involved in Cornish mining since 1974.

Gerald Crosland Pengilly, MBE, ACSM, C.Eng, FIMM, aged 55, is Managing Director of SWCM. He is a Mining Engineer and the former Managing Director of South Crofty Limited, for whom he worked from 1963 to 1979 running the South Crofty and Pendarves tin mines in Cornwall. He joined the Board of SWCM at the beginning of 1980, and is a former Chairman of the Cornish Chamber of Mines. He is also a Governor of the Camborne School of Mines.

Donald George Neville, LLB, aged 49, is the Director responsible for legal affairs. He is a Solicitor and a partner in Messrs. Cardales, Solicitors. Formerly a Director of International Systems Reserach Limited, a management consultancy company, he joined the Board in 1978 and is also a Director of Dundonian.

Ronald William Potts, TD, JP, aged 52, is an Executive Director of SWCM. He is a retired Lt.-Colonel, *serving with the Duke of Cornwall's Light Infantry (TA). He joined the Board in 1977* and is a member of the Council of the Cornish Chamber of Mines. He has been actively involved in Cornish mineral exploration since 1970, both as a director and a consultant to several exploration projects.

Richard Michael McNeil Williams, FCA aged 35, is the Director responsible for financial affairs. He is a Chartered Accountant and partner in Messrs. Benriches, Chartered Accountants. He joined the Board in 1979 and is also a Director of Dundonian.

Geological and Mining Consultants

RRI is one of the largest firms of geological and mining consultants with offices in the U.K., Australia, Canada, U.S.A., Singapore and Indonesia. It has considerable experience of tin and tungsten mining in most major producing countries and has undertaken a number of specific assignments in south-west England.

The members of the professional team which has been working on SWCM's exploration programme are as follows:

Name	Qualifications	Profession	Position
Dr. H. R. Bichan	BSc, PhD, FIMM, MAIMM	Geologist	Director of RRI-Minerals
J. L. Gaskell	BSc, MIMM	Geologist	Head of Mineral Assessment Unit
P. S. Bridges	BSc, MSc, DIC, MIMM	Geologist	Senior Geologist
J. Emberton	BSc, FGS, MIMM	Geologist	Senior Geologist
E. Daniell	ACSM, MIMM, MAIMM	Mining Engineer	Senior Mining Engineer
D. Jordan	BSc, MIMM	Mineral Processing Engineer	Head of Mineral Process Studies Unit

Risk Factors

Investment in mineral exploration is speculative. The exploration and development of mineral resources requires substantial investment. Such investment involves a degree of risk and results cannot be predicted. The factors to be taken into account include the following:

(a) The nature and geology of Cornish mining preclude the proving of substantial reserves in *advance of operation.*

(b) Although inferred reserves are stated to exceed two million tonnes in the Callington and Gunnislake areas the ore may prove not to be economically recoverable because of factors which cannot be foreseen until further work is completed.

(c) The unexplored parts of the Callington area may after investigation prove not to contain any *economically recoverable reserves.*

(d) As a small mining company, SWCM may be unable to finance the development of a major mine. In this event, SWCM may be forced to part with a proportion of its beneficial interest to achieve full commercial production.

(e) The market prices of tin, tungsten, zinc and silver are volatile (Figure 5). Apart from industrial *supply and demand, many external factors which cannot be foreseen may have an impact on* the market price of these minerals.

(f) Planning permission to mine in the main areas would be required. Much of the licence area is zoned for mineral development but permission to mine cannot be obtained in advance. Planning permission to explore the main areas has been granted and subsequently extended.

Accounts and Dividends

There is set out in Appendix 1 a copy of the Report by the Auditors and Reporting Accountants showing the financial results of SWCM for the four years ended on 31st March 1980, and a Pro Forma Balance Sheet prepared on the basis that the new shares have been taken up under the Offer for Sale. *The accounts indicate that a little revenue has been earned from the processing of minerals. This pattern* is likely to continue whilst exploration and development takes place.

No dividends have been paid by SWCM since the date of its incorporation. SWCM's policy with regard to the distribution of future profits will be determined in the light of circumstances once a profitable mining venture has been established.

Premises

SWCM shares office accommodation with its parent company Dundonian at Downs House, Brighton Road, Banstead, Surrey which comprises a 4,000 sq. ft. self-contained office building. SWCM also has a local office at Tredethy, Bodmin, Cornwall, which is shared with the Tredethy Estate as part *of the service agreement with Mr. R. W. Potts. As exploration progresses, however, SWCM plans to* establish offices on site in the Callington area.

Yours faithfully,
MAX LEWINSOHN,
Chairman

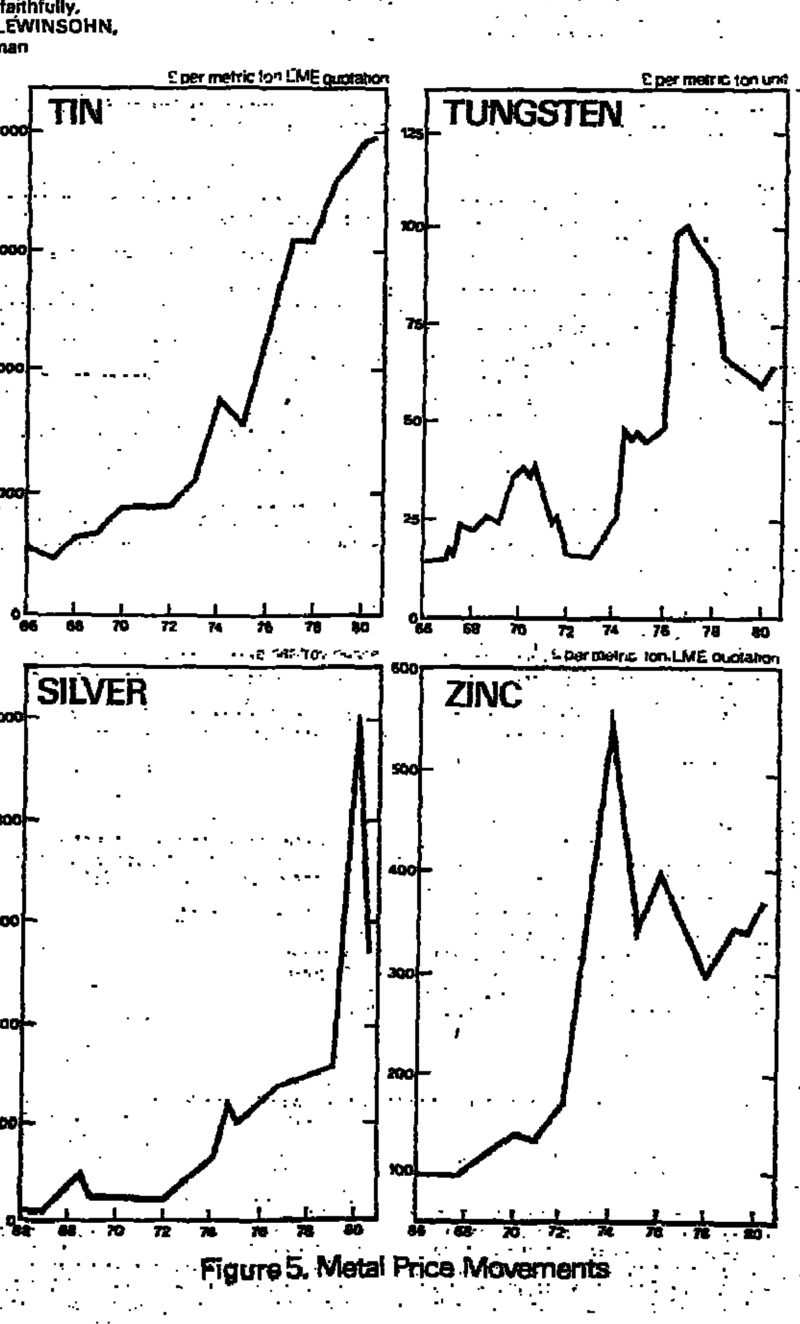


Figure 5. Metal Price Movements

Appendix 1

Accountants' Report

The following is a copy of the Report from Berke, Cohen, Fine and Partners, Chartered Accountants:

14 John Princes Street,
London W1M 9HB,
30th May, 1980.

To: Rowe Rudd & Co.,
and
The Directors,
South West Consolidated Minerals Limited.

Gentlemen,

We have examined the accounts of South West Consolidated Minerals Limited (SWCM) for the period from 1st April, 1976 to 31st March, 1980 which we audited and which were prepared under the historical cost convention.

The summarised Profit and Loss Accounts, Balance Sheets and Statements of Source and Application of Funds set out below are based on the audited accounts. No adjustments thereto are considered appropriate.

In our opinion the summaries and the notes thereon give, under the historical cost convention, a true and fair view of:

1 The state of affairs of SWCM at the dates stated.
2 The profits of SWCM attributable to the shareholders for the periods stated.
3 The source and application of funds of SWCM for the periods stated.
4 The Pro Forma Balance Sheet of SWCM following completion of the Offer for Sale.

Balance Sheets

	Note	1977 £	1978 £	1979 £	1980 £
		Years ended 31st March,			
Fixed Assets	2	68,833	284,168	1,425,870	3,773,561
Current Assets:					
Debtors		35	16,998	109,007	65,019
Cash at Bank		—	—	—	14,427
		68,868	301,154	1,534,877	3,853,007
Current Liabilities:					
Creditors		5,781	3,032	1,213	7,811
Bank Overdraft		19,791	403	2,527	—
		25,572	3,435	3,740	7,811
Net Assets		43,296	297,719	1,531,137	3,845,196
Share Capital	3	20,000	20,000	165,000	165,000
Reserves	4	4,602	5,064	1,065,977	3,107,216
Holding Company	5	18,694	272,655	204,564	440,549
Mineral Exploration Grants	6	—	—	95,596	132,431
		43,296	297,719	1,531,137	3,845,196

Profit and Loss Accounts

	Note	1977 £	1978 £	1979 £	1980 £
		Years ended 31st March,			
Sales	1a	79,680	13,800	15,167	42,415
Cost of Sales	7	75,078	13,338	14,425	40,198
Profit before Taxation		4,602	462	742	2,217
Taxation	8	—	—	—	—
Profit after Taxation		4,602	462	742	2,217
Balance brought forward		—	*4,602*	*5,064*	*5,806*
Balance carried forward		4,602	5,064	5,806	8,023

Statement of Source and Application of Funds

	1977 £	*1978* £	*1979* £	*1980* £
	Years ended 31st March,			
Source of Funds:				
Profit after Taxation	4,602	462	742	2,217
Capitalisation Issues	20,000	—	300,000	—
Mineral Exploration Grants	—	—	95,596	36,835
Holding Company	18,694	253,961	(68,091)	235,985
	43,296	*254,423*	328,247	275,037
Application of Fund:				
Additions to Fixed Assets	68,833	215,323	233,543	278,669
Capital Costs	—	—	3,000	30,000
	68,833	215,323	236,543	308,669
Increase/(Decrease) in Working Capital	(25,537)	39,100	91,704	(33,632)
Arising from Movements in:				
Debtors	35	16,963	92,009	(43,988)
Creditors	*(5,781)*	*2,749*	*1,819*	*(6,598)*
Bank Balances	(19,791)	19,388	(2,124)	16,954
	(25,537)	*39,100*	*91,704*	(33,632)

Pro Forma Balance Sheet (Note 11)

	£	£
Fixed Assets		3,773,561
Current Assets	2,599,446	
Current Liabilities	7,811	
		2,591,635
Net Assets		6,365,196
Share Capital		2,400,000
Reserves		3,392,216
Holding Company		440,549
Mineral Exploration Grants		132,431
		6,365,196

NOTES

1 Accounting Policies of SWCM

The principal accounting policies which have been applied consistently in arriving at the financial information set out in this report are:

a *Sales—Sales represent the invoiced amounts of mineral sales to third parties excluding value added tax.*

b. Depreciation—Depreciation is calculated to write off the cost of the assets on the following consistent basis:

Mining Licences and Development Costs	None
Plant and Equipment	Primarily 12½% reducing

c Deferred Taxation—No provision has been made for deferred taxation as no liability is expected to arise in the foreseeable future. The liability which would arise if the fixed assets were disposed of at the amounts stated in the accounts is £1,027,664.

2 Fixed Assets

Mining Licences and Development Costs:

	£
At Cost	796,368
Surplus arising on valuation	2,977,193
Net Book Value at 31st March, 1980	3,773,561

The valuation by the Directors in April 1979 was based *upon the report of* Robertson Research International Limited, Geological and Mining Consultants dated September 1978, having regard to the mineral reserves proven and inferred and taking account of the likely costs of extraction.

3 Share Capital

At 31st March, 1980 the authorised, issued and fully paid share capital of SWCM was:

	£
Authorised—5,000,000 Ordinary Shares of 10p each	500,000
Issued and fully paid— 1,650,000 Ordinary Shares of 10p each	165,000

4 Reserves

	£	31st March, 1980 £
Capital Reserves		
Surplus arising on valuation	*2,977,193*	
Capitalisation Issues and Costs	(353,000)	2,624,193
Share Premium Account		*475,000*
Revenue Reserves		*8,023*
		3,107,216

5 Holding Company

The ultimate holding company during the period of this report was Dundonian Limited, incorporated in Scotland. The current account is interest free and repayable on demand.

6 Mineral Exploration Grants

Mineral Exploration Grants represent the total amount claimable in accordance with the Mineral Exploration *and Investment Grants Act 1972 in respect of expenditure incurred to 31st March, 1980.* Such Grants may be repayable if exploration is successful.

***7 Profit and* Loss Accounts**

	1977 £	1978 £	1979 £	1980 £
	Year ended 31st March,			
Cost of Sales includes:				
Bank interest payable	445	3	—	—
Plant hire	7,150	129	206	475

8 Taxation

SWCM has not incurred a taxation charge due to the availability of capital allowances arising from development costs.

9 No dividends were paid to shareholders in the relevant accounting periods.

10 No accounts for submission to members have been prepared subsequent to 31st March, 1980.

11 Pro Forma Balance Sheet

The Pro Forma Balance Sheet has been prepared on the basis of the audited accounts of SWCM at 31st March 1980, as adjusted for.

(i) the increase in capital of £1,685,000 which took place on 22nd May, 1980;
(ii) the increase in capital of £550,000 which results from the Offer for Sale;
(iii) the expenses of the Offer for Sale estimated to amount to £230,000.

Yours faithfully,
BERKE, COHEN, FINE and PARTNERS, Chartered Accountants.

Appendix 2

Statutory and General Information

1 Share Capital

		Authorised		Issued
(a)	At present	£3,000,000	in Ordinary Shares of 10p each	£1,850,000
(b)	After Completion	£3,000,000	*in Ordinary Shares of 10p each*	£2400,000

(c) The changes which have occurred in the authorised and issued share capital of the Company since incorporation are as follows:

Date	*Authorised* share capital £	*Issued and* fully paid £
23rd November, 1975	100	2
3rd February, 1976	50,000	20,000
30th June, 1978	500,000	140,000
15th November, 1978	500,000	150,000
8th December, 1978	500,000	165,000
22nd May, 1980	3,000,000	*1,850,000*

(d) In March 1977 Dundonian completed the acquisition of the entire issued share capital of SWCM.

On 30th June, 1978 the capital of the Company was sub-divided into shares of 10p each from shares of £1 each.

In December 1978 Burma Mines Limited and Planned Savings (Holdings) Limited (then Brieve Limited) subscribed in cash at £2.00 per share for 150,000 Ordinary Shares of 10p each.

On 1st May, 1980 Dundonian acquired the said holding of 150,000 Ordinary Shares in return for an issue of shares in Dundonian. SWCM is now a wholly owned subsidiary of Dundonian.

All issues of shares other than those made in June 1978 and in May 1980 have been made for cash.

Dundonian intends after completion of the Offer for Sale to transfer 500,000 of the shares in SWCM held by it to the Vendors of the share capital of SWCM on the occasion of its purchase by Dundonian, in satisfaction of Dundonian's obligation, agreed as part of the arrangement for the sale of such capital, to account for 10 per cent. of any notional profit arising on the dilution of Dundonian's holding in SWCM. Thereafter Dundonian will be the beneficial owner of 18,000,000 shares in SWCM (75 per cent. of the issued share capital of SWCM).

2 Subsidiaries

SWCM has no subsidiaries.

3 Working Capital

Following the Offer for Sale, the Directors of SWCM consider that SWCM will have sufficient working capital for its present requirements.

FINANCIAL DIARY

The following is a record of the principal business and financial engagements during the week. The Board meetings are mainly for the purpose of considering dividends and official indications are not always available whether dividends concerned are interims or finals. The sub-divisions shown below are based mainly on last year's timetable.

TODAY
COMPANY MEETINGS—
Cml. Bk. of the Near East, 107-112, Leadenhall Street, EC, 11.00
Currys, 46-50, Uxbridge Road, Ealing, W., 12.30
Dunlop, Quaglinos, Bury Street, St. James', SW, 12.00
Hoskins and Horton, Midland Hotel, New Street, Birmingham, 12.30
BOARD MEETINGS—

Reed Intnl.
Scotcros
Sketchley
Tanks Consd. Invs.
Transparent Paper
Interims:
MEPC
Ward (Thomas W.)
DIVIDEND & INTEREST PAYMENTS—
AB Electronic Prods. 3p
Asscd. Book Publishers 4.7p

BOARD MEETINGS—
Finals:
Allied Leather Inds.
Armitage Shanks
Buffelsfontein Gold Mining
Clydesdale (Transvaal) Collieries
Eva Inds.
Mountview Ests.
Ocoma Development Inv. Tst.
Sentrust Beperk
Standard Fireworks
Time Prods.
Trans-Natal Coal Con.
Interims:
Camford Eng.
Carr's Milling Inds.

W.stall (Henry)
Interims:
Brentnall Beard
Brooke Tool Eng.
H'cison and Welch
Pleasurama
DIVIDEND & INTEREST PAYMENTS—
East Rand Gold and Uranium 85cts.
Finlay Packaging Ord. Units 1.1p
Free State Geduld Mines 475cts.
Guardian Royal Exchange Ass. 8.5p
Halstead (James) 0.8p
Neill (James) 3.642p
Rexnord Inc. 26cts.
Rowan and Boden 1.31p
Tameside 10¼pc Rd. 1984-85 £0.5625
Wight 3.65p

President Steyn Gold Mining 280cts.
Rockware Db. 3½pc
SGB Db. 4½pc
Standard Chartered Bk. 16p
Utd. Carriers 3.5p
Watney Mann and Truman Db. 3½pc
Welkom Gold Mining 130cts.
Western Hldgs. 676cts.
SATURDAY, JUNE 7
DIVIDEND & INTEREST PAYMENTS—
Central and District Properties Db. 3¼pc
Chubb Lns. 4 4¼pc
Lec Refrigeration 2.35p
SUNDAY, JUNE 8
DIVIDEND & INTEREST PAYMENTS—
Reed Intnl. 5pcPf. 1.75pc. Do. 7pcPf. 2.45pc. Do. Lns. 2¼ 3½pc (undated)

INSURANCE

Car cover problems

BY OUR INSURANCE CORRESPONDENT

A FEW weeks ago in Brighton Mr. Gordon Borrie, the director general of Fair Trading, addressed the second national conference of the British Insurance Brokers' Association. But it is only in the last week or so that the vast majority of insurance men and women — including the many brokers who were not at Brighton — have been able to read fully what he said.

It is clear that he still finds the insurance industry, like the curate's egg, good only in parts.

Complaints systems, the statements of insurance practice, the lack of regulation of non-broker intermediaries — all came under fire as they have done before — and there Mr. Borrie *had nothing new to say.* Clearly he remains uninfluenced by what insurers have said publicly — and perhaps even privately — in reply to his arguments.

One new theme, particularly apposite to a brokers' conference, was the problem of misquotation of motor insurance premiums. Motor insurance generated two-thirds of the complaints received by the brokers' association in 1979 and half of these concerned allegations of misquotation.

If we reckon that only the very vocal complain to an association like the brokers', we must assume that lower down the line most motor insurance brokers are well aware of the problems they face in the every day provision of motor cover.

There, often, speed is of the essence — the motorist wants insurance, to be able to licence and drive his car. Much cover is provided immediately on request against fairly brief particulars, the premium being assessed on those particulars.

Subsequently more detailed information is provided on a signed proposal form and then it can be discovered that material underwriting facts have been overlooked — facts which justifiably predicate a higher premium or more restricted cover than at first indicated.

If this happens, however justified the increase, says Mr. Borrie, "the consumer is nevertheless left with a sense of grievance and may feel that the broker is not conducting his business in a fair and honest manner."

But surely the broker can protect himself against this sense of grievance? Surely he can make it clear that where he provides a quotation without a fully completed proposal form, his quotation is provisional only and may be reviewed when more detail is available?

Surely he can say this verbally and give the customer a printed note to this effect with his cover note?

Is it really true that if he tries to do business this way, the customer goes to the firm next door?

Mr. Borrie says: "the broker must make special efforts in this area to prevent misunderstandings. In particular, this means asking the necessary questions and making the motorist aware of the importance of revealing material facts."

APPOINTMENTS

New group finance controller for Ocean Transport

Mr. V. F. Roberts has been appointed group financial controller of OCEAN TRANSPORT AND TRADING in place of Mr. *Frank G. Roby, who has retired.* Mr. Roberts has held senior finance appointments in both the group's land-based and marine divisions.

★

Mr. G. T. R. Hayter has been appointed executive director of WYNDHAM INVESTMENTS, which manages property and investments for Allied Breweries Pension Funds.

★

Mr. Giuliano Lonardi has been appointed managing director of FIAT AUTO (UK) in place of Mr. E. Spinelli, who takes up new responsibilities for international projects, while remaining chairman of FIAT Finance.

★

Mr. David T. Andrews has been appointed financial director of MAN-VW TRUCK AND BUS.

★

Mr. Allan Boyd has become a director of ATCOST STRUCTURES, with responsibility for the Scottish region.

★

Mr. A. H. Sykes has been appointed group managing director of YORKSHIRE FINE WOOLLEN SPINNERS and continues as managing director of its subsidiary John Woodhead. Mr. T. D. Griffiths has become sales director of John Woodhead.

★

Mr. *John Edgar has become* managing director of TORVALE ENGINEERING, of Pembridge, in place of Mr. Brain Pamment, who has taken up an appointment in Kenya.

★

Mr. Rudi Huisman has become commercial director and Mr. Tony Hallatt, marketing director of PEDIGREE PETFOODS, a division of Mars.

★

Mr. Colin Milne has been elected chairman of the INSTITUTE OF ARCHITECTURAL IRONMONGERS in succession to Mr. Ron Sterling. Mr. John Leggatt has become vice-chairman and Mr. Geoff Trevena, honorary treasurer.

★

Mr. W. R. Andrewes has been appointed finance director of the OXFORD UNIVERSITY PRESS.

★

Mr. Bob Smith has been appointed president of MERGENTHALER LINOTYPE COMPANY OF AMERICA and will be succeeded by Mr. Anthony J. Alfano as managing director of Linotype-Paul in the UK.

★

Mr. Deryk Vander Weyer has been appointed chairman of BARCLAYS BANK UK and a deputy chairman of the Barclays Bank Group from October 1. His duties as group vice chairman responsible for finance and planning and as chairman of Barclays Merchant Bank will be taken by Mr. Frank Dolling. He will be succeeded as senior general manager of Barclays Bank International by Mr. Peter Leslie.

★

ANTONY GIBBS HOLDINGS states that Mr. D. E. Franklin is to resign from the Boards of Antony Gibbs and Sons, Antony Gibbs Investment Management and Antony Gibbs Unit Trust Managers from June 30.

★

Mr. John P. Cadwallader has been taken into the partnership of MURRAY AND CO., stock brokers, Birmingham.

★

Mr. Robert F. Corroon and Mr. Crawford A. Black have been appointed non-executive directors and Mr. Peter S. Christie has become a director of MINET HOLDINGS.

★

Mr. J. K. Rudgard director of sales and marketing of H. P. Bulmer Ltd has been appointed an executive director of H. P. BULMER HOLDINGS.

★

Sir Monty Finniston has been appointed a non-executive adviser to the Board of P. PANTO AND CO.

Parliamentary business this week

TODAY

COMMONS—Finance Bill, committee stage.

LORDS—Alexandra Park and Palace Bill, third reading. Social Security (No. 2) Bill, second reading. Debate on the Government's policy on the Moscow Olympic Games.

TOMORROW

COMMONS—Finance Bill, committee stage.

LORDS — Solicitors (Scotland) Bill, second reading. Employment Bill, committee stage.

SELECT COMMITTEES—Environment. Subject: Council House sales. Witnesses: Thamesdown Borough Council and Crawley Borough Council. (Room 16, 4.15 pm). Foreign Affairs, Overseas Development Sub-Committee. Witnesses: Commonwealth Development Corporation, and Overseas Development Administration. (Room 15, 5.15pm).

WEDNESDAY

COMMONS—Finance Bill, committee stage.

LORDS—Debate on the urgent need for industry to improve productivity. Street Offences (Amendment) Bill, second reading. Licensed Premises (Exclusion of Certain Persons) Bill, committee stage. Debate on difficulties facing young people training for a career in the arts.

SELECT COMMITTEES—Education, Science and Arts. Subject: The funding and organisation of courses in higher education (Room 6, 10.30 am). Foreign Affairs. Subject: Effects for British Foreign Policy of Soviet expansion in Afghanistan. Witness: Mr. Edward Heath. (Room 15, 10.30 am). Energy. Subject: The Government's statement on the new nuclear power programme. Witnesses: Bechtel Corporation. (Room 8, 10.45 am). Industry and Trade. Subject: Import and Export Trade. Witnesses: Marconi and Plessey, Civil Aviation Authority. (Room 16, 10.45 am). Public Accounts. Subject: Out-turn, selective examination of taxpayers accounts, standards of manual operation of the PAYE system. Witnesses: Board of Inland Revenue. (Room 16, 4 pm).

THURSDAY

COMMONS—Debates on Opposition motions on the decision to charge "full cost" fees to overseas students and on the offence of loitering with intent under the Vagrancy Act 1824.

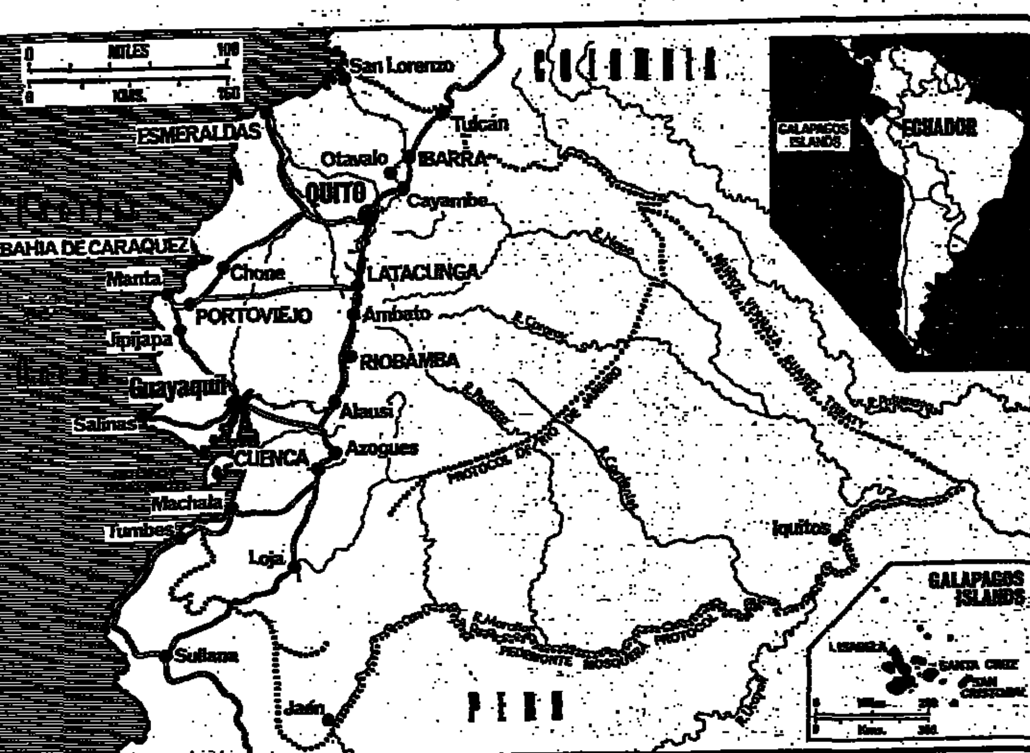
LORDS—Transport Bill, report stage.

SELECT COMMITTEES — Foreign Affairs. Subject: Sanctions against Iran. Witnesses: Foreign and Commonwealth Office and Department of Trade. (Room 8, 10.30 am). Welsh Affairs. Subject: The role of the Welsh Office and associated bodies in developing employment opportunities in Wales. Witnesses: British Steel Corporation. (Room 16, 4 pm). Home Affairs. Race relations and immigration sub-committee. Subject: Racial disadvantage. Witnesses: Home Office. (Room 15, 4.30 pm).

FINANCIAL TIMES SURVEY

Monday June 2 1980

ECUADOR



The coming to power of President Jaime Roldós could prove to be a turning point for Ecuador. If Sr. Roldós can persuade his country to implement his strategies, he will have achieved a great deal and demonstrated that the republic need no longer be an example of political and economic inefficiency.

New plan shows great promise

Hugh O'Shaughnessy
Latin American Correspondent

ECUADOR'S PROSPECTS have seldom seemed more promising than they do today. Lest it be thought that this newspaper is being carried away on a wave of euphoria, one must quickly add that Ecuador's prospects have never seemed terribly bright.

For much of its existence, what is now the Republic of Ecuador was a disregarded corner of some other, bigger political conglomeration. During much of the Spanish empire, what was then called the Audiencia of Quito was a geographical subdivision of the enormously rich Vice-royalty of Peru, which was ruled from Lima.

The Vice-royalty of Peru itself was to Spain in the sixteenth and seventeenth centuries what India was to Britain in the nineteenth, but little of Lima's prosperity spread north. Quito's interest were often sacrificed to the businesmen of Lima and Quito seemed content to slumber on, its fame coming from the piety of its inhabitants and the fine quality of the religious works, produced by its craftsmen.

It was freed from Spanish rule, more by the design, of liberators from Venezuela in the early years of the nineteenth century than by any great military efforts of its own people. Then, briefly, it became a part of Greater Colombia, before relapsing into comparative obscurity as the poorest and most backward of the three States into which Greater Colombia was divided. It made a modest living from cocoa.

The country's history as an independent State was a jumble of warring conservative and liberal factions almost till the present day. The squabbles of the rival demogogues made little difference to the lives of ordinary Ecuadorians.

Quito may have been the conservative administrative capital, high in the Andes, and Guayaquil, the more liberal, outward-looking trading port on the Pacific. But the scattered pre-Colombian inhabitants of the Andes and the workers of mixed race on the plantations of the coast were hardly affected by the dogfights of a small political elite.

The spirit of rampant demogoguery that, for decades, affected Ecuador was best distilled in the career of Dr. José María Velasco Ibarra whose motto was, "Give me a balcony and I will rule Ecuador." He was President five times from 1933 to 1972 with a bewildering succession of political allies, from the Communists to the extreme Right.

Only once did his political opponents allow him to complete his constitutional term. Seeing his political incoherence and blatant self-seeking, one must have some sympathy for their intolérance of him.

Military rule

His final overthrow ushered in an era of military rule which was of little benefit to the country and which, in turn, gave way to elected civilian Government once again, last year.

The coming to power of President Jaime Roldós could prove to have been a turning point for the country if he is able to put a good part of his programme into action.

His route to the presidency was a fortuitous one, insofar as it hinged on the fact that his uncle, Sr. Assad Bucaram, the most powerful populist leader in the country and the uncrowned king of Guayaquil, was forced to give up his own presidential ambitions. His Levantine ancestry disqualified him from standing for president and, in Roldós, he saw a way of gaining the top position by proxy.

But, as with so many other proxies, President Roldós, once in office, became his own man, wanting to put into effect his own plans. Roldós and Bucaram are today so much at odds that the Government is made impossible. The former in the presidency is check-mated by the latter's control of congress and the latter's initiatives are blocked by the former's presidential veto. The matter will soon be put to a national referendum.

It will be a tragedy if the president does not sooner or later win a freer hand to start putting his ideas into practice.

Unlike most of his predecessors in office, Roldós has become president with a firm, realistic and well-detailed scheme of government, the National Development Plan.

The plan, which the Government has already attempted to make the basis for a country-wide debate, says that it aims for a pragmatic measure of reform.

With a refreshing lack of demagoguery it warns that the strategy of "growth at all costs" ends up with a situation in which the few become rich and the mass becomes poor, with grave social consequences. The redistributive pattern, on the other hand, ends in a paralysis of growth, with the eventual destruction of the democratic system and the nullification of real social progress.

For its execution, the plan calls for a minimum consensus in Ecuador. In his introduction to the plan, Vice-President Osvaldo Hurtado comments: "As it is not the product of a dictatorial régime, it cannot be imposed in a forced and authoritarian manner, as happened with previous plans."

It puts forward a strategy to make the best of Ecuador's unexploited natural resources. A big priority is given to the development of oil resources which, if successful, would be the quickest way to provide the money needed to finance development.

At the same time, it places emphasis on raising te standard of living of the mass of Ecuadoreans who are now a burden on the economy, rather than an asset to it.

Forty fundamental projects have been selected as the corner-stones of development in President Roldós's five-year term. They are biased towards the improvement of life in the countryside which, in previous administrations, was given the lowest priority.

Most money is being spent on the provision of country roads which will enable the products of the farms to reach the towns and export markets more easily.

Rural electrification, housing, health, drainage and drilling of wells are included in an effort aimed at closing the gap between the more prosperous towns and the more backward rural areas, the booming centre of Quito and Guayaquil, and the more neglected provincial areas between the illiterate and those who have been able to receive an education.

The success of the strategy will depend on its ability to win results from the oil industry, the fisheries, the farmers and the miners, in coaxing production and wealth from sectors, which were often overlooked in the past.

This will demand powers of political persuasion and of administration such as Ecuadorean governments have never, in the past, been able to exhibit.

If President Roldós is able to persuade his country to accept his strategies and work toward their implementation, he will have achieved a great deal and demonstrated that the republic need no longer be an example of demagogery and administrative ineptitude.

CONTENTS

The Pichincha volcano towers above a residential section of Quito, the capital city of Ecuador

Natural resources hold key to bright economic outlook

THE GOVERNMENT of President Roldós is getting down to the difficult and unpopular task of "mopping up the milk" which was so liberally spilt by the military rulers who preceded him in office.

It was the good fortune of the military authorities that they were in control of the country when the oil boom hit Ecuador. Oil began to be produced in commercial quantities in 1972. And by 1974, when the military authorities were comfortably installed, it was flowing at what was destined to be its fastest rate and represented 16 per cent of the GNP.

From then on, it was all downhill. Not having the expertise with the new flood of money coming out of the oil wells, the country's rulers were in no position to put it efficiently to work. Government structures were not sophisticated enough to deal with it.

Nevertheless, as production fell away, the Government wanted to keep going the boom conditions with which it had become so quickly and easily familiar.

In order, therefore, to keep the boom going they had recourse to the plentiful offers of money which they received from foreign bankers, eager to put out funds to a member of OPEC. The foreign money did the job which the generals wanted it to do and, in the decade of the 1970s, the average annual growth in the economy was 7.45 per cent, one of the highest in the developing world.

But the explosion of newly-acquired foreign debt was enormous. From a figure of $241.5m in 1970, it grew till last year it was provisionally out at nearly 10 times that amount, $2,343.2m.

Amortization grew into one of the heaviest burdens on the country's resources. The faltering of the oil production and the galloping increase in the subsidised domestic consumption of fuel led to grim forebodings that Ecuador could become the first OPEC country to be in financial difficulties.

EVOLUTION OF THE FOREIGN DEBT

($m)

	Use of outstanding debt	Amortization of outstanding debt	Use of new loans	Amortization of new loans	Balance of foreign debt
1904	11.4	488.7	836.5	58.0	5,549.5
1979	—	—	—	—	3,566.6
1980	975.3	771.6	249.0	—	4,019.3
1981	398.5	431.5	433.7	—	4,420.0
1982	155.6	506.2	809.1	—	4,878.5
1983	62.7	540.7	868.8	21.0	5,248.3

Source: Conade

The amount spent on debt servicing went from $85.5m in 1976 to $832m, inclusive of an extraordinary item of $510m, part of a rescheduling deal with foreign lenders.

The new elective regime is faced with restoring some order into a chaotic situation. If they are to bring the country round to paying its way again, they will have to win an increase in exports, by pushing up oil production once again and also encouraging agriculture to move les sluggishly.

The diffiuclty here is that low domestic prices for oil and agricultural products mean that there is much avoidable waste of the former and little incentive for the producers of the latter.

Main targets

But the Government is aiming at doing a great deal more than merely pushing up production in order to meet the needs of foreign creditors. The Roldós Government has produced a detailed programme of all round development through which it hopes to right some of the most glaring weaknesses in the social fabric of the country.

The macro-economic targets of the plan are six. Between now and 1984, it is planned to achieve an average annual growth rate of 6.5 per cent which raise per caput income from $1,114 in 1978 to $1,312 in 1984.

Investment, public and private, would be increased at an average annual rate of 6.8 per cent and rise as a proportion of the GNP from 26.9 per cent to 27.1 per cent.

Productivity would be increased by 2.6 per cent every year and 489,000 new jobs would be created. Modest steps would be taken to increase the share of wages in the national income, from 37 per cent in 1978 to 40 per cent in 1984.

Local savings would be encouraged to produce 323bn sucres of the 376bn sucres needed over the period.

Lastly, exports would be boosted so that they grew at 4.2 per cent a year rather than the 1.5 per cent registered in the last three years.

Oil and agriculture will be the principal priorities.

In the oil industry, for instance, expenditure on drilling is seen to rise from 480m surces this year to nearly 3bn sucres in 1984, investment in refining Ecuador's domestic production is scheduled to go from les than 400m sucres this year to more than 3bn sucres

In the countryside, the Government intends to spend 4.4bn sucres over the next five years, to 1984, on bettering the rural road network. The intention is to allow crops more easily to go to market in the town and abroad and allow the country-dwellers to enjoy more of the benefits of economic growth which have hitherto been confined largely to the cities and to Quito and Guayaquil, especially.

The achievement of these ambitious goals by a democratic Government, subject to all the pressures of an electorate newly-awakened to its rights after years of military rule, will be a difficult and delicate task.

The congress had hardly been re-inaugurated last year before it decided to raise the minimum wage substantially and decree a reduction of the working week to 40 hours, as from October this year.

The inflationary pressures idherent in such a series of measures, justified as they were from the social and political point of view, will be increased if the Government is not able to balance its big new expenditure plans with a surge in new income. The current budget of 45.3 bn sucre was approved by congress.

The Government is crossing its fingers that a rise in oil prices and, therefore, in its take from the producing companies will allow it to finance its budget without too much difficulty. The Government will be on tenterhooks while it sees oil production and exports develop.

In the longer-term, the outlook for Ecuador must be bright if systems can be worked out to exploit the great variety of natural resources that the country contains.

After all, a relatively small population has at its disp:osal big oil and gas deposits, an agricultural sector which can produce a wide variet yof products from bananas to temperate cereals, a continental shelf which contains one of the world's most important stocks of fish—not to mention a tourist potential which has barely been considered.

The challenge to Ecuadoreans sito their organisational capabilities. There is no lack of resources to make productive.
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Hugh O'Shaughnessy

BASIC STATISTICS

Area	109,483 sq. miles
Population	7.81m
GNP	184.05bn sucre
Per capita	23,565 sucre
Trade (1978)	
Imports	$1,582m
Exports	$1,516m
Imports from UK	£33.4m
Exports to UK	£6.2m

Currency: Sucre; £1=57.00, official rate; 64.23, free rate.

PROJECTED BALANCE OF PAYMENTS

($m)

	1980	1981	1982	1983	1984	Total 1980-84
CURRENT ACCOUNT						
1—Export of goods	2,711.0	3,294.5	3,746.5	4,207.8	4,817.4	18,831.2
(a) Traditional	827.5	967.6	1,131.0	1,330.8	1,562.4	5,819.3
(b) Oil	1,508.1	1,874.9	2,069.7	2,075.8	2,075.8	9,752.2
(c) Manufactures and other	375.4	452.0	545.8	801.2	1,083.9	3,259.7
(i) Manufacturers	350.9	423.7	513.2	763.3	1,041.5	3,092.6
(ii) Other	24.5	28.3	32.6	37.9	43.8	167.1
2—Import of goods	−2,252.0	−2,712.0	−3,113.0	−3,376.0	−3,766.0	−15,219.0
Petroleum products	− 96.6	− 223.1	− 262.5	− 68.5	− 37.8	− 688.5
3—Trade account balance (1 & 2)	459.0	582.5	633.5	831.8	1,105.4	3,612.2
4—Export of services	254.1	379.9	423.5	479.2	626.0	2,162.7
5—Import of services	−1,221.9	−1,462.8	−1,664.5	−1,799.3	−2,076.7	−8,225.2
(a) Investment income	− 530.9	− 606.8	− 682.5	− 772.3	− 834.7	−3,427.2
(i) Interest	− 410.4	− 462.0	− 513.3	− 577.3	− 622.1	−2,585.9
(ii) Profits	− 120.5	− 144.0	− 169.2	− 195.0	− 212.6	− 841.3
(b) Other services	− 691.0	− 856.0	− 982.0	−1,027.0	−1,242.0	−4,798.0
6—Service account balance (4 & 5)	− 967.8	−1,082.9	−1,241.0	−1,320.1	−1,450.7	−6,062.5
7—Transfers	− 40.0	− 40.0	− 40.0	− 40.0	− 40.0	− 200.0
8—Current account balance	− 468.8	− 460.4	567.5	− 448.3	− 305.2	−2,250.3
CAPITAL ACCOUNT						
9—Direct foreign investment	100.0	168.0	180.0	184.0	126.0	758.0
10—Loans	1,224.2	832.2	964.7	931.5	847.9	4,800.6
(a) Outstanding in 1979	975.3	398.5	155.6	62.7	11.4	1,603.5
(b) New	249.0	433.7	809.1	868.8	936.5	3,197.1
11—Loan servicing	− 771.5	− 431.5	− 506.2	− 561.7	− 546.7	−2,817.7
(a) Contracted to 1979	− 771.6	− 431.5	− 506.2	− 540.7	− 488.7	2,738.7
(b) New	—	—	—	− 21.0	− 58.0	79.0
12—Long-term capital account balance	552.7	568.7	638.5	553.8	427.2	2,740.9
VARIATION IN THE INTERNATIONAL MONETARY RESERVE						
	− 83.9	− 108.3	− 71.0	− 105.5	− 121.9	−490.6

Source: Conade.

Crowds, above, throng market stalls in Equator Town; below, signs hang in profusion over a busy street in Quito

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Political conflict unresolved

WHEN President Jaime Roldós Aguilera was sworn in by the military authorities last August, Ecuadoreans breathed a sigh of relief.

After voting three times in the space of 18 months, witnessing a lengthy and highly controversial result of the first round of the presidential election, and waiting on tenterhooks to find out whether the armed forces would really cede power, people were anxious to see the new Administration get to work and carry out its plans. Instead, they have watched a power struggle between the Government and Congress take the country into such dangerous ground that President Roldós announced he might have to call a plebiscite to resolve the crisis. But, in a last-minute attempt to persuade the president to drop such a drastic measure, political party leaders have pledged their support for Government programmes — a conciliatory gesture welcomed by Sr. Roldós.

Hostilities between the President and members of Congress are only too common in Ecuadorean politics. This time, ironically, the chief actors are not *only* in the same political party, but also of the same family. Assad Bucaram, President of Congress is President Roldós' uncle, and both belong to the Concentration of Popular Forces (CFP), Ecuador's most powerful party.

Sr. Roldós took over the CFP presidential candidacy when Assad Bucaram was barred because of his Lebanese parentage. Instead of bowing to his party chief's authority, Sr. Roldós soon showed that he was a personality in his own right, with many supporters in circles that had previously not been drawn to the CFP.

After the first round of the presidential election—which Sr. Roldós won, but without the overall majority needed to avoid a run off—it was already clear that the 38-ysear-old lawyer and university professor was at odds with the old style Caudillo politics of his uncle-in-law. Assad Bucaram took over the leadership of the CFP in its early years, when the party membership was fuelled by the growing number of poor, under-employed immigrants to the port city of Guayaquil. He served twice as mayor of Guayaquil, and forged an unchallengeable personal power base in the city, partly through land donations to the migrants who had built thei rhuts over nearby swamps. It looked as though Sr. Bucaram would win the presidency in 1972, but a military coup led by General Guillermo Rodriguez Lara, forestalled the elections.

Sr. Roldos joined the CFP in 1966 and became one of the most coherent political voices in a populist movement that gradually gained strength on a national scale. For 40 years and five presidencies, Jose Maria Velasco Ibarra had dominated the Ecuadorian political scene, but when the armed forces announced their plan to return the country to civilian rule, the extraordinary orator was already over 80, and, from his exile in Buenos Aires, decided not to run for another term, leaving a considerable share of his votes to be picked up by the CFP.

Clear victory

In the second round of the presidential election, Sr. Roldos won over 1m votes, giving him a two-to-one victory over his Right-wing opponent, Sixto Duran Balle. Support in the highlands came from the Vice-President, Osyaldo Hurtado's party, Popular Democracy, as well as from other groups such Roldos has a clear mandate for his programme of "economic development with social justice."

At the same time, Assad Bucaram and 28 other CFP representatives were elected to a 69-man Congress.

President Roldós answers questions at a news conference in Quito.

According to many, Sr. Bucaram was only showing his true colours when he made a pact with the Conservative Party in order to gain the presidency of Congress. All his rhetoric against the Right, the oligarchy and the establishment business groups, evaporated in favour of an alliance with Ecuador's most traditional political grouping, now much reduced in size and influence.

In theory, President Roldos was well placed, with a strong vote for himself and his own party reigning in Congress. Nothing could have been further from the truth: the personal animosity between the President oft he country and the president of Congress developed to such a point that it involved the two powers in constant wrangling, semi-paralysing the Government.

President Roldos vetoed some two-thirds of the Bills sent to him by Congress, mainly on the grounds that Congress was legislating on matters outside its competence. After 10 years of dictatorship, provincial representatives were keen to please their supporters and showered the executive with projects for local roads and universities. At the same time, Congres refused to grant Sr. Roldos tax increases to finance the budget and it stalled for months on legislation for the creation of the National Development Council, presided over by Vice-President Hurtado.

The Left and the unions claim the Government has done nothing to fulfil its electoral promises of social and economic reforms, while the Right (which during the electoral campaign forecast "chaos" if Sr. Roldos should win), says "it told you so." But despite some disillusionment among those who had very high expectations, support for the president is still strong, and he has been able to count on the sympathy of most popular organisations in his search for a solution to the impasse with the legislature.

After fruitless discussions with Congressmen in his own party, President Roldós put forward five constitutional reforms which included the power to dissolve Congress once during the five-year presidential term.

Cries of "dictatorship" greeted this move, and four of the reforms were rejected by Congress, giving the President the *right* to call a plebiscite. Although Ecuadoreans would officially have been deciding on changes to the constitution, it would in practice have been a Roldós-versus-Bucaram vote.

Economic and political sectors criticised the call for a plebiscite because of the inevitable long period of instability, with insults and accusations raising temperatures and possibly leading to violence over the country.

A commission of elder statesmen mediating between the Government and Congress, tried to pacify tempers and save the situation by suggesting a two-tier congressional system which would take Sr. Bucaram and the 11 other national representatives in to a Senate.

However, the political parties could not agree on the mechanics of this formula, and it was Sr. Roldós himself who came to an understanding with enough Congressmen to ensure a Government majority — at least temporarily.

The creation of a Senate is still on the cards, but can now be discussed at leisure during the next Congressional session, when, as seems likely, a less obstructive legislator is elected to replace Sr. Bucaram as president of the House of Representatives.

Negotiations over the political conflict were complicated by the CEP's insistence on interrogating Sr. Carlos Feraud Blum, the Interior Minister, about alleged abuse of power by those responsible to his Ministry. In calling for the Minister's impeachment by Congress, his own party hoped to embarrass President Roldós, but the contrast between Sr. Feraud's coolly intelligent defence and the lengthy haranguing of his accusers has done little to improve the CEP's standing.

Accusations

The military authorities, who stepped down gracefully last August amid congratulations from the United States and other Governments, have been blamed for many of the country's political and economic ills.

Several members of the armed forces have come under fire from a congressional commission for special investigations. Admiral Alfredo Poveda, the former head of the military junta, published a statement calling on the armed forces "to be alert for the strict observance of justice.

The Minister of Defence recently reaffirmed the Armed Forces' loyalty to constitutional law, and there is no reason to suppose the military would be tempted to intervene again.

Although Sr. Bucaram's hold over Congress has weakened in recent weeks, and Sr. Rodrigo Berja of the Democratic Left called him a "political corpse," many believe the old magician still has plenty of tricks. But Sr. Roldós alliance with some of the modernising groups in Congress, though shaky, should allow him to carry through projects included in his ambitious five-year plan and concentrate on governing.

Sarita Kendall

Efforts to improve crop production

ECUADOR'S agricultural sector has lagged sadly behind the rest of the economy, with production rarely matching population growth, food imports growing ever larger, and an agrarian reform programme that has led to a proliferation of small plots or *minifundios*.

But three agricultural products — cocoa, coffee and bananas — still account for 35 per cent of exports and, as a greater proportion of oil reserves must be kept for local needs, these three commodities will continue to be the backbone of Ecuador's export earnings in the future.

The area sown with traditional crops has dropped substantially in recent years, because, say the farmers, controlled prices are so low and investment has been diverted into more profitable ventures.

Apart from the export commodities, the production of oilseeds, fruit and vegetables, and cattle has been growing steadily. Agriculture still contributes 20 per cent of GDP—compared with nearly 30 per cent ten years ago—and the official rate of growth for the last decade averaged about *4 per cent a year. However, this* figure includes forestry and fishing, both of which had annual rates of growth of more than 10 per cent.

Bad droughts

As far as crops are concerned, production fell by at least 3 per cent a year, while livestock increased by about 5 per cent a year. A series of bad droughts during the last three years has affected production, especially in Manabí and parts of the highlands. Severay major irrigation projects in the Guayas Basin and in the Jubones and Chone valleys, will help to ease the drought/flood cycles along the coast.

Whatever the constraints on agriculture, land is not one of them. The World Bank calculates that Ecuador is farming less than half the potential arable land on the coast, and using only 10 per cent of the Amazon land suitable for pasture.

In the highlands, there is less room for expansion and intensive farming on steep slopes has led to severe erosion in some provinces, though an extensive forestry programme is planned to try to arrest this.

Agriculture has been given a key role in the National Plan, reflecting the Government's conviction that the sector must reo revitalised. It also reflects the view that the rural population —which still represents 40 per cent of the total — should be helped towards a better standard of living.

Investment in rural development, including education, electricity, secondary roads, silos, forestry and irrigation, is

Banana crop awaiting transportation on the Guayas River

planned at US$80m for the five-year period. Nearly US$120m of this is to be spent on "integrated rural development projects," covering a land area of more than a million hectares and benefiting up to half a million peasant farmers.

But some critics of Government policy point out that the areas chosen for these projects are not on the whole areas where there is conflict between large landowners *and peasants,* nor are they the regions of greatest poverty.

Rather, the Government is strengthening middle income peasant farmers by supporting them with organisation, infrastructure and agricultural inputs, and creating a buffer between the *latifundio* and *minifundio* owners, while failing to tackle the problems of the latter group.

The plan does, however, include land reform measures —enough to irritate the chambers of agriculture, but not enough to earn the gratitude of the peasant movements.

Since Ecuador's land reform programme began in 1964, it has pleased no one and left a number of problems in its wake.

The classic feudal relationship on the big *hacienda*, where the peasant worked the owner's land in exchange for a plot to cultivate, has been virtually eliminated. However, the land turned over to the peasants was often poor quality, and the Agrarian Reform Institute did not have a generous enough budget to follow up the reforms with credit and technical assistance.

As the same time, landowners who feared they would have their *haciendas* expropriated (though very few ever did), divided their land and put the proceeds into construction, commerce and industry in the cities.

One programme specifically designed for the poorest groups is operated by the Central Bank. Foderuma, the Development Fund for the Marginal Rural Sector, finances small co-operatives and communities whose average income is less than US$280 a year. It also provides loans for agriculture, fishing and craft projects, as well as aid for education, health and traditional cultural activities. In efforts to avoid paternalism, Foderuma channels

CONTINUED ON NEXT PAGE

Big potential for tourism

"ECUADOR is unknown—tourists are always surprised by what they find here," says Eduardo Proaño, president of the Metropolitan Touring Agency. But whereas, not long ago, the country was just another stop on a South American tour, more and more groups are now coming specifically to Ecuador and the travel agencies are expanding their brochures to include specialised tours for archaeologists, climbers and naturalists.

The attractions are many and they range from the art treasures of colonial Quito to the vastness of the Amazon jungle and to mile-upon-mile of sandy Pacific beaches. Ecuador also owns the world-famous Galapagos Islands—where, incidentally, Charles Darwin developed his theory of evolution.

In the last six years the number of tourists visiting Ecuador has more than doubled, reaching 240,000 in 1979. Although the Government tourist board, Dituris, forecasts a slight drop in the rate of growth over the next five years, it is still expected to rise by 10 per cent a year.

The majority of tourists come from South American countries, especially neighbouring Colombia and Peru, but nearly a quarter are from the United States and a sixth come from Europe.

As many as 30,000 people arrive are on organised tours—generally agreed to be efficient and well-run. Though tourism is fairly well distributed through the year, July and August are peak months when hotels overflow and airlines are heavily booked.

Even though Ecuador earned around US$50m from tourism last year, Ecuadoreans spent far more than this abroad — particularly in the U.S. Efforts *to encourage local tourism have* met with some success, and a number of new tourist complexes, with camping and sports facilities, are being built. However, the pull of Disneyland and a Miami shopping spree seem difficult to counter.

The vicious circle is difficult to break, says Ernesto Vásquez of Dituris: "People say the tourists do not go to places outside the main cities, because there is no accommodation — but private investors do not want to risk their money in these areas. This is where public investment has been important."

The State has built a number of *paradores* or small hotels in out-of-the-way spots, such as Vilcabamba, famous for its centenarians, and Huaquillas on the Peruvian border.

More paradores are under construction, and so are some bigger hotels for example, the 120-room, US$2.9m Huayna Capac for Cuenca, in which Dituris has shares.

The tourist board has a number of other projects on its books, including restaurants, mountain huts and beach facilities, but, with budget restrictions, the more ambitious among them will probably have to be postponed — "we should be encouraging the private *sector in the future, not investing* so much ourselves," comments Señor Vásquez.

Development law

Most of the investment in tourism is national, rather than foreign, while a number of immigrants have taken advantage of the tourist development law to help finance hotels and restaurants.

During 1979, 44 companies were registered for tax and other benefits under the law, the majority of them in Quito, Guayaquil and Cuenca.

One large foreign project, a Holiday Inn hotel for Quito, is at the design stage, and Ecuadoreans in the tourist business are looking for foreign partners for other new ventures.

Away from Quito and Guayaquil, where there is a good range of hotels from luxury class downwards, services are more erratic. Cuenca, an attractive old highland city with a flourishing craft industry, including ceramics, weaving, embroidery and leather work, is a strong regional centre close to Ingapirca, Ecuador's most complete Inca monument.

But most of the seaside and highland market towns have relatively few comforts to offer —exceptions are Salinas, the country's main beach resort, *complete with casino, deep sea* fishing boats and lobster on the menu, and Imbabura province, north of Quito, where the glorious mountain scenery attracts a thriving weekend trade and the Otavalo market draws busloads of tourists.

Unfortunately, Ecuador's biggest tourist attraction is also one with limited capacity. Only 12,000 people a year are supposed to visit the Galapagos Islands, but the real figure is nearer 20,000.

"As long as there is rigid control and properly qualified guides to keep people to the foot-paths, there will not be serious ecological damage," says Señor Proaño, whose company runs tours on specially-built boats to the islands. Every year, thousands of bookings have to be refused in an attempt to keep the islands' unique plant and animal life from extinction.

Because the islands are 600 miles out in the Pacific, provisioning is costly and the tours are expensive, rarely working out at less than U.S.$600 for four days. But the lure of the 500 lb tortoises, the flightless cormorants and the blue-footed boobies seem irresistable, and a disappointed visitor to the Galapagos is rarer than a red and green trimmed marine iguana.

Both Dituris and the private sector agree that too little effort has gone into selling Ecuador in other countries, especially the U.S. and Europe, and that tourists should be encouraged to explore more of "the unknown Ecuador."

Apart from mountaineering—the snow-capped peaks regularly attract climbers from Europe—other attractions are trekking in the highlands; the jungle is also becoming popular. Weekly markets in Indian villages are also a tourist attracton,, though not always one to the liking of the inhabitants. In villages such as Otavalo and Salasaca, the locl crft industry has been strongly stimulated by tourists' appetites for ponchos and wool sweaters. The jungle Indians profit from the sale of blow pipes and wooden carvings, but there is a growing reaction among some groups against performing in folk dances and having their pictures taken.

The Plaza, Quito, with the Presidential Palace on the right

Air links between Britain and Ecuador were improved with the introduction by British Caledonian of direct services last August.

The independent airline serves Ecuador with a weekly DC-10 service which leaves London Gatwick airport just before midnight on Thursdays and calls at Guayaquil en route from Caracas to Lima.

On Sundays the northbound service from Lima calls at Quito, then at Caracas before returning non-stop to London Gatwick.

As well as serving British and Ecuadorian business interests, the service has made Ecuador more accessible for tourists from Britain and other parts of Europe.

Reflecting this, the British Caledonian sister company, Blue Sky now markets a 19-day holiday entitled "Ecuadorian Discovery," including a jungle safari, a tour of Quito and several days in the Galapagos Islands.

Jungle safari

Although tourism is relatively new to the Amazon region, tour operators believe this is one of the most important areas for growth. Two safari lodges and a "Flotel," which cruises the River Napo, also offer adventures on jungle trails and in dug-out canoes.

The Government sees tourism both as a generator of dollars and as a source of local employment. It is sponsoring two local "hotel schools" to train Ecuadorians. More than 5,000 hotel beds are to be added during the next five years ,and five holiday camps are to be built for internal use.

"We have the potential for growth in tourism—the landscape, the climate and the history," says Senor Proano. The problem is to make use of it without destroying it, as the Galapagos example so clearly shows. But there, it is the goats —rather than the humans—that have done most damage.

Sarita Kendall

An Indian women harvests potatoes at Latacunga

Crop production

CONTINUED FROM PREVIOUS PAGE

funds through local community organisations and emphasises the "self-help" aspect of their operation.

An agricutural development law, passed by the military Government last year, was well-received by landowners for the protection it gives them against expropriation and land invasions.

The law includes a number of measures which concern medium-sized farms, but very little for the *minifundista*, which still produce a substantial proportion of the food consumed in urban areas—although not enough to cover local needs, and increasing amounts of grain have had to be imported as farmers have ceased to grow wheat on a large scale.

The internal support price is nearly double the import price per ton, but production costs are very high on the mountainous slopes of the Andes. Some land, especially in Chimborazo, has gone over to barley, which is used in the brewing industry. Even so, nearly half the country's barley needs has to be imported.

Wheat imports are now up to around 300,000 tonnes and the local crop is less than 20,000 tonnes—compared with 80,000 tonnes, ten years ago.

Among the other crops for domestic use, there has been an increase this year in the areas planted with maize, potatoes and rice, while more credit and better prices are expected to encourage coastal farmers to grow enough cotton to supply the textile industry. However, there have been some rice imports (as well as sizeable shipments filtering across the Colombian border). Powdered milk imports are also increasing.

Dairy farmers, as with so many others in the agricultural business, claim that the price of milk is too low to be profitable, and about half of the milk produced in Ecuador is used for the production of butter and cheese, on sale at high, uncontrolled prices in city supermarkets.

In theory, processors are allowed to add up to 25 per cent powdered milk in the local plants. In practice, they normally use more than half. Even though dairy farming is considered to be more advanced than most other highland farming, yields on the big farms are still very poor. Imports of Holstein cattle for breeding have improved the stock in the central Sierra and in Azuay in the south, but investment is limited and efficiency low.

On the other hand, substantial investment is taking place *on the coast*, particularly in the banana and cocoa crops. The change-over to the high yielding Cavendish variety of banana is almost complete. The National Banana Programme's spraying and technical assistance campaigns, coupled with the efforts of exporters to control quality, have improved Ecuador's competitive position on the international banana market. Last year's exports reached 1.4m tonnes, bringing in nearly US$200m.

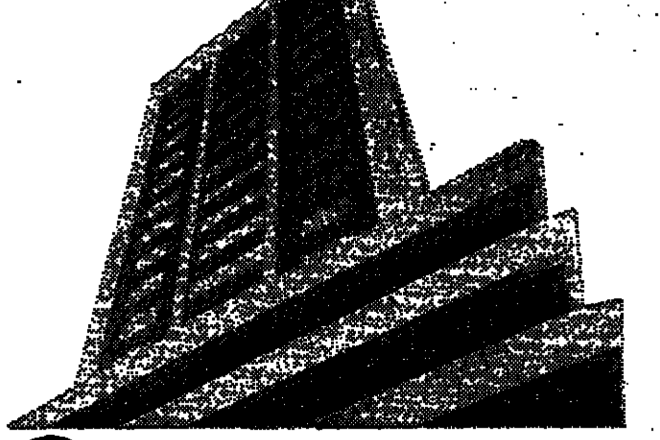
A massive rehabilitation programme for cocoa plantations is also beginning, and a US$40m loan from the World Bank will be available after a full-scale feasibility study has been completed.

About 270,000 hectares are producing cocoa, with Guayas and Los Rios as the main growing areas. Experts believe that at least a quarter of the area needs rehabilitating of production and yields are to be maintained. *Some* 80 per cent of cocoa output goes to local processing industries, which exported US$232m worth of products in 1979. As a result, exports of beans have been falling rapidly in recent years, and foreign buyers are finding it more difficult to obtain Ecuador's aroma quality.

The coffee sector, which is mainly centered in Manabi, has not seen great success, though last year's exports earned U.S.$247m. Plants have been attacked by disease. And with little credit available for replanting more resistant, higher-yielding varieties, production has suffered. The news that coffee rust is nearing the Peruvian border has led the organisers of the Coffee Programme to launch publicity and training campaigns to ensure that rust is reported and fought as soon as it appears.

But according to some of the Programme's agronomists, Ecuador's plants are so old and badly in need of renewal "that it would not be such a bad thing if a touch of rust made people aware of the need for investing in their plantations."

S.K.



Rapid developments in industry

ECUADOREAN INDUSTRY has flourished during the past ten years. And industrialists see no reason why should not continue to grow at around 10 per cent a year, provided that political upheavals do not undermine confidence in the economy.

President Roldos has managed to convince the majority of businessmen that he intends to work with the private sector—and, indeed, the National Plan relies heavily on private investment—but Congress has generated some bad moments by, for example, calling for the nationalisation of the pharmaceutical industry, a move that was rapidly squashed by the Government.

Despite the rapid development of industry—during the boom years of the mid-seventies the growth rate went over 13 per cent—manufacturing contributes less than 20 per cent of Ecuador's GDP.

Most industries are still small family owned enterprises producing traditional consumer goods. But the modern sector has been growing relatively fast, with the emergence of large food processing and textile plants employing over 500 people.

Intermediate goods, such as chemicals and metals, now account for some 22 per cent of industrial output, and capital goods, which have grown more rapidly than other groups, represent about 10 per cent of production.

However, during 1979 only about 70 per cent of installed capacity was used on average, a slight decrease compared with the previous year.

Foreign investment has been moving into the industrial sector, particularly from the United States and Germany, and Ecuador is relying on further foreign capital for the realisation of some of its most important programmes over the next five years: vehicle production, steel, petrochemicals, cement and fertilisers.

Production of the Cóndor car in Quito

Between 1972 and 1979, direct foreign investment in industry reached about US$230m, with chemicals and food processing absorbing half of this.

Although local industrialists claim that political uncertainty has virtually paralysed their activities, and that plans for plant expansion have been shelved, foreign businessmen seem to be taking a longer-term view, and trade missions continue to show strong interest in investing in Ecuador.

Production costs

There are some immediate problems, however.

Eduardo Villaquirán, president of the Chamber of Industry of the capital's region, comments: "There's not a single sucre to be had in the bank, and we have to pay high interest rates for dollars. It would be better if the government put up the interest rate here, at least there would be something to borrow. We also have a tremendous growth in production costs because of wage increases—the situation is not easy but it's certainly not unsalvageable."

President Roldós' approval of a law doubling the industrial minimum wage to U.S.$150 a month, coupled with his agreement to a 40-hour week, from October, brought forth a storm of protests from factory owners, with warnings of unemployment, bankruptcies and high inflation.

Small industries and artesans are the most affected, but the increase in costs throughout the sector is expected to take inflation over 20 per cent this year.

The Government has promised special support and $30m in credits for small industry, which provides some 75 per cent of it only contributes 30 per cent industrial employment though of value added in industry.

In Cuenca, for example, nearly 50,000 people work in the Panama hat industry, which last year exported $8m worth of hats.

Ecuador's industrial exports increased four-fold between 1976 and 1979, reaching nearly $500m—an impressive growth, even though a substantial part of the increase is due to the importance of semi-processed cocoa products, which make up nearly half the total.

Among the major export successes are household electric goods, worth $14m in 1979 and sold mainly in the Andean countries by Ecasa, one of Ecuador's biggest companies with over a thousand employees.

Another growth item has been seafood products, reflecting the boom in the fishing industry. Total fish exports, including those classified as non-industrial, came to $115m in 1979 compared with $28m in 1974.

As Ecuador's main port, Guayaquil has been a natural focus for industries based on coastal resources such as fish, cocoa and coffee, while Quito has attracted a greater proportion of textile, clothing and non-food light industry.

The Government is trying to counter the tendency for companies to concentrate in the two main cities, and a series of tax incentives have encouraged some firms to build plants in the highland towns of Cuenca, Ambato and Riobamba, as well as Machala, Portoviejo and Esmeraldas on the coast.

Water shortages in Quito and Guayaquil, together with a series of power black-outs in the capital, affected commerce and industry last year, but communications in other parts of the country are too poor to encourage decentralisation.

However, one of Ecuador's biggest industrial projects, a Volkswagen passenger vehicle plant, is to be located in Riobamba. The company will begin assembling the Passat model next year, while construction goes ahead on the plant for the manufacture of the Golf, which is to be exported to the Andean countries.

Under the Andean Pact Vehicle Programme, Ecuador has been allotted one basic model in the 1,050 to 1,500 cc car category, and a truck in the 3.0 to 4.6 ton group, which General Motors is to produce.

The Volkswagen agreement, including a plant for the production of 100,000 engines a year, calls for an investment of $110m, of which about half is to come from Volkswagen and the German Development Agency.

Apart from the light truck, General Motors will eventually be making 150,000 gearboxes a year, mainly for export to Pact countries.

The price of the Volkswagen car is uncertain as yet, but will apparently fall comfortably below import prices of similar cars, which currently stand at around $14,000 with tax.

Ecuador already produces a small number of passenger cars, appropriately named the Andino and the Cóndor. Output of the Cóndor, a fibre-glass-bodied version of the Chevette, runs to eight a day and the car sells well on the local market.

Manufactured by Aymesa, in which Clyde Petroleum of Great Britain has substantial interests, the Cóndor is made with nearly 4 0per cent national parts, but the General Motors engine is imported from Brazil.

One of the Government's biggest projects over the next five years is the establishment of a steel industry. Ecuasider, a State company in which the Army's industrial arm has a 51 per cent share, is planning to start construction on a plant with a capacity for producing 210,000 tons of steel a year, as soon as possible.

A site near Machala has been chosen, and the industry will supply local needs from 1983.

Second nad third phases call for a doubling in production capacity and the installation of a plant for direct reduction using natural gas from the Gulf of Guayaquil.

Investment in the first phase is expected to be $120m, of which a large part will have to be foreign loans.

Agro-industrial projects are also high on the government's list. Some 50 per cent of the raw materials used in Ecuadorean industry are imported, and apart from stimulating local agricultural output, agro-industries can be sited away from Quito and Guayaquil.

S.K.

An urgent need for more oil exploration

EXPLORATION IS to be the cornerstone of Ecuador's oil policy for the next five years. For unless substantial new reserves are found, the country will become an oil importer after 1985 and the most important source of foreign earnings will have dried up.

Ecuador's economic fortunes have been ruled by oil since 1972, when the Amazon fields started producing, yet during these years hardly any of the profits were ploughed back into drilling exploration wells.

Sr. José Corsino Cardenas, Minister of Natural Resources, has promised that new risk exploration contracts will be ready within the next few months and, judging by the flow of oil executives through Quito, the Government should be able to draw back some of the foreign companies that fled the country when Ecuadorean nationalism led to OPEC membership and a strong stance on the defence of non-renewable natural resources.

Both the coastal and the Amazon regions are judged promising for exploration. Apart from the discoveries of oil in the northern Ecuadorean Amazon and natural gas in the Gulf of Guayaquil, Peru is exploiting fields close to the border, and heavy crude has been found in the central Amazon province of Pastaza.

However, Sr. Cardenas' view that known oil reserves can be doubled over the next five years is thought to be very optimistic, even if the Government can achieve its target of drilling more than 300 wells during the period.

Encouragement

The state oil corporation, CEPE, recently found a new oil-bearing structure near the Colombian frontier, and though the production of the first well, Secoya 1, is estimated at little over 6,000 barrels per day, another well, Shura One, is expected to produce over 10,000 barrels a day and the discoveries have heartened the national oil industry. After several years in the doldrums, with a few policy decisions being taken and repeated postponement of the risk contracts, fillip was badly needed.

The Roldos government is making energy a priority, and the oil sector is to absorb more than US$1bn of public investment. About US$60m will be spent on exploring and developing the natural gas reserves of the Gulf of Guayaquil which have been handed over to the CEPE following the failure of Northwest Pipeline to fulfil its contract. The agreement called for the use of the gas in a fertiliser industry, but Northwest insisted that this would not be profitable enough and said the gas should be used to provide electricity.

Though the proven reserves of the Amistad field are estimated at less than 300bn cubic feet, it is reported that other fields nearby may have a much higher potential.

Ecuador produced 78m barrels of crude during 1979, 6½ per cent up on the 1978 figure. The official rate of production for the CEPE-Texaco structures in the Amazon basin was brought down to 204,000 barrels a day, but CEPE's manager, Sr. José Carvajal, says that output can be raised to 220,000 barrels without damaging the fields.

The CEPE-City Investing field in the northern Amazon produces under 10,000 barrels daily, and the old Santa Elena fields, which have been in operatio nsince the 1920, now produce about 2,000. CEPE officials say an extra 25,000 to 30,000 barrels per day can be brought into production during 1981, which should keep total output at more than 200,000 barrels per day for several years, even with the gradual decline of the Sacha and Shushufindi structures in the CEPE-Texaco area.

On the basis of its crude reserves, which are calculated variously at between 1.0 and 1.3bn barrels, and its exports, Ecuador is the smallest OPEC member. But with an Ecuadorean as secretary-general of OPEC, and with the Latin American Energy Organisation (OLADE), based in Quito, Ecuador's presence on the international oil scene is stronger than its production would suggest.

OPEC recently assigned U.S.$5m to OLADE as a contribution towards the research and development of alternative energy sources in Latin America. OLADE's programme includes a study of geothermal power in Ecuador, and the organisation has also helped instal the first biogas plant in the country.

Sr. Cardenas applauds OPEC's co-operation with OLADE—a number of joint projects have been mooted—and says the Government is anxious to take an active part in programmes designed to help Third World countries with no oil resources.

Although the volume of Ecuador's crude exports is falling as internal consumption rockets higher and higher, last year's oil earnings rose by nearly 75 per cent to U.S.$906m as a result of the rise in international prices. However, this figure is inflated by the inclusion of royalty earnings with direct exports. About .7m barrels were sold on spot markets. Oil still represented 45 per cent of total export income in 1979, compared with 55 per cent in 1974, the record year for exports by volume. Ecuador's most important markets for crude are the Antilles, Panama, the U.S. and Chile.

Production in 1980 was forecast at about 215,000 barrels per day, provided the new Yuca wells in the CEPE-Texaco area are brought into production in the second half of the year, but it may now be higher if the CEPE goes ahead and raises the overall Amazon rate. Just over half will be needed to supply local refineries and there will be nearly 100,000 barrels daily left for export—slightly less than last year's figure.

The CEPE is to commission a study of the Santa Elena fields to see whether a secondary recovery programme is justified, and though the corporation has coastal production to 20,000 barrels other experts believe this is exaggerated.

While oil reserves are falling, domestic consumption of refined products is soaring up by 15 per cent a year. One of the Government's most difficult tasks is to restructure fuel prices and rationalise consumption, and President Roldós has pledged himself to carry through the necessary measures, shirked by the previous government for the political repercussions.

The President will have to choose his moment carefully because any such announcement traditionally brings protesting students out on to the streets in force. Ecuador's petrol retails for US$ 20 cents a gallon, and the Government is subsidising fuel imports to the tune of US$32 a barrel, or nearly US$90m in all.

The CEPE calculates that up to 20 per cent of the country's refined production is being smuggled across borders into Peru and Colombia, where prices are much higher. The Government also plans to change the overall structure of energy consumption so that a greater proportion of electricity is generated by water, rather than oil fuels.

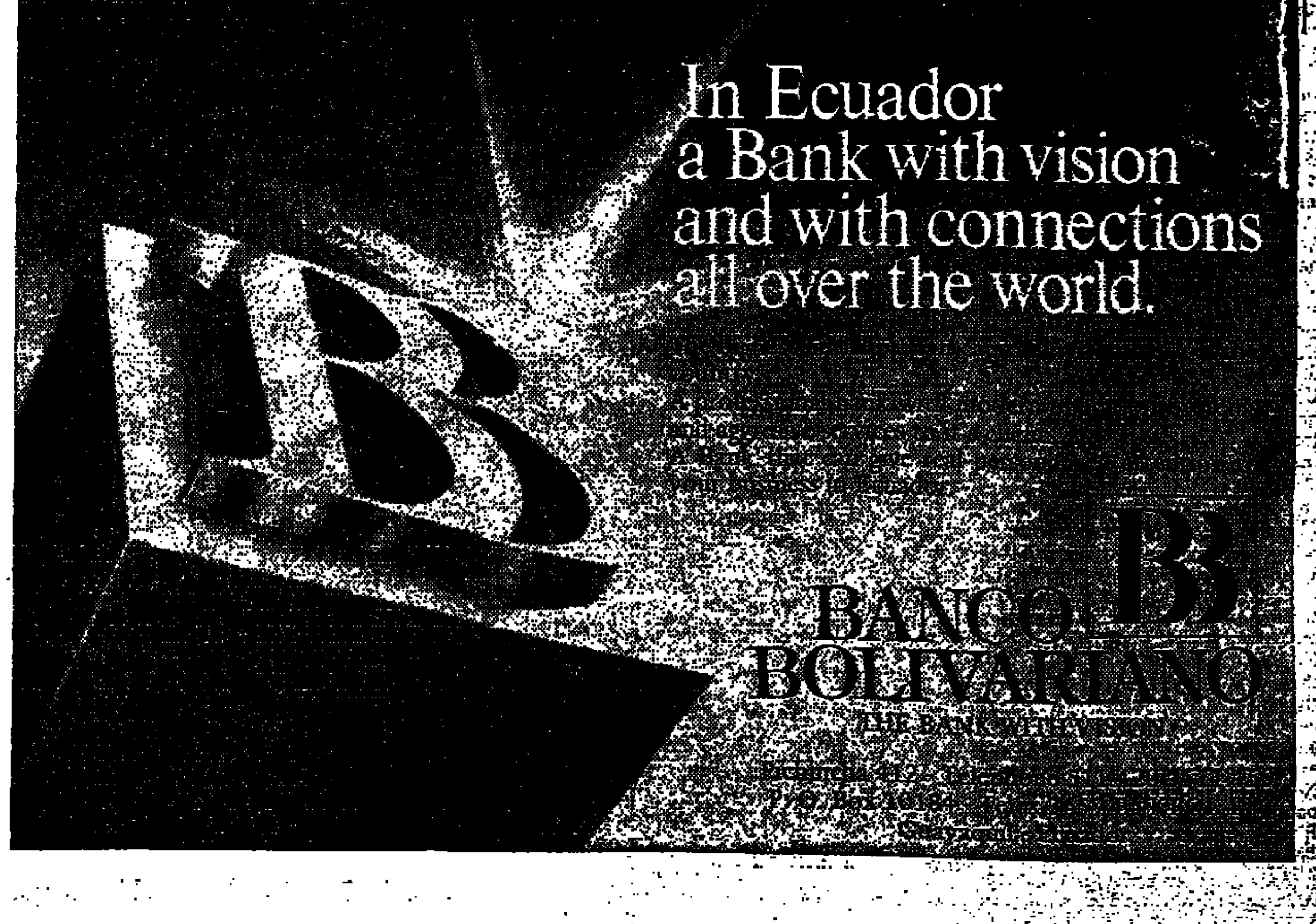
Ecuador's refineries cover about 90 per cent of the local demand for fuels, and US$112m worth of products were exported last year. CEPE's refinery at Esmeraldas has a capacity of 55,000 barrels per day and the Anglo Ecuadorian Oilfields plant at La Libertad can process 32,000 to 36,000 barrels, depending on the crude used. There are also two other smaller refineries.

Plans for expanding the capacity of both the bigger refineries have been drawn up, and the CEPE has announced the construction of a new 75,000 barrels per day plant, but no decision has yet been taken on which alternative will go ahead first.

The CEPE's activities have ben growing steadily since the corporation was created in 1972. The nationalists among Ecuador's oil experts would like to see the corporation take full responsibility for exploration and exploitation, but other believe it does not have sufficient experience, and that national funds should not be spent on high-risk exploration efforts.

Nevertheless, the CEPE is already taking a more active part in exploration, and will be buying up to four drilling rigs soon. The corporation plans to drill about 30 wells in the Amazon region, including several exploratory ones in the Secoya area. Very deep wells, up to 20,000 feet down, are projected for the CEPE-Texaco area, and for manabi.

S.K.



ECUADOR VI

Sr. Germanico Salgado faces some daunting tasks in his capacity as Ecuador's Minister of Industries. His profile, and that of several other well-known personalities, are presented here by SARITA KENDALL:

Germanico Salgado

Sr. Germico Salgado

Sr. Rodrigo Borja

GERMANICO SALGADO'S appointment as Minister of Industries could hardly be more appropriate. After forming part of the Andean Pact's technical junta during the early years of the Andean common market, he is now on the other side of the fence, responsible for implementing the industrial programmes and tariff changes planned by the junta.

He says that experience has changed his attitude towards the pact. "I'm more concerned with the practical side of the agreements than planning new projects. We had to take decisions very quickly at the beginning, but now it's more important to consolidate what has been done so far."

Although Sr. Salgado, 55, believes the pact is making headway, "progress is slow and there are many points of conflict." Ecuador's industry has undoubtedly benefited from the size of the Andean market, and a number of new plants have been set up to take advantage of the industrial programmes.

Foreign investment has flowed into industry, within the limits of the pact's Decision 24, and, despite the cries of doom coming from the private sector, there are no signs that political instability is producing adverse effects as yet.

As tariffs between the countries inside the Andean region are cut back, industry will be exposed to competition from Peru and Colombia. Ecuador's special status allows it many exemptions, however, and the Minister of Industries believes there is time to build up the weakest sectors. In fact, incentives and subsidies for Ecuadorean industry are over-generous in some areas, and the system needs cleaning up, says the Minister.

"We must rationalise protection so that there is one instrument for each objective, not a dozen," he says.

He would also like to see local companies open up more, rather than remaining family businesses, and the Government is considering the possibility of conditioning benefits to, for example, a listing on the stock exchange.

Discussions

An economist well-known in international circles for his work on economic integration and planning, Señor Salgado is president of the United Nations Development Planning Committee and has taken an active part in discussions on the new international economic order.

But he is not optimistic for Latin America about current developments in these talks.

"They are stagnant, there have ben on real results. It even looks as though the International Cocoa Agreement is finished—an many ways we are going backwards," he says.

Ecuador has been an active participant in some international producers' organisations—oil and cocoa are two examples—and, according to Sr. Salgrado, the Government is studying the pros and cons of joining the Bogotá coffee group and the Union of Banana Exporting Countries.

Apart from nearly 12 years spent working abroad in international organisations, Sr. Salgado has also taught economics at Quito's Central University, and was technical head of the National Planning Department—a job he particularly enjoyed.

Having been very much a professional economist for most of his working life, with a number of publications to his name, he has nevertheless adapted quickly to his new political role. But he is still refreshingly unevasive in his answers, and manages to maintain an informal touch on the top floor of the Ministry of Industries.

Rodrigo Borja

A NEW generation of politicians is rapidly replacing the old party chiefs and ex-presidents of Ecuador, and a new generation of political parties is ousting the traditional Liberal and Conservative groups:

No group has grown as fast as the Izquierda Democratica (Demecratic Left), founded only ten years ago. It is already reckoned to be the second political force in the country ,with 12 representatives in Congress.

Rodrigo Borja, the party's energetic young candidate in Ecuador's last presidential elections, has drawn a large personal following, particularly in Quito, his home town.

Although Sr. Bofja is a lawyer and has been professor of political science at Quito's Central University since 1963, he now devotes himself to politics, full time. Elected one of the 12 national representatives in Congress last year, he has been a fiery—and often aggressive—figure on the debating floor, uncompromising in his political beliefs.

The Democratic Left was started by a group that included people from the Socialist Party, the Left of the Liberal Party and many who had found no other channel for political activity.

Its slogan is "Social Justice with Freedom." Sr. Borja describes in an amusing way how he and some friends were once painting the phrase along roadsides, near hoardings advertising aspirin, beer and insect sprays. One illiterate Indian woman gåve permission for her wall to be used as a billboard, and then said: "What pain is this medicine good for?"

"For th pains of the country!" she was told. Most of the Democratic Left's support comes from professional middle class groups and from people living in the poor *barrios*, especially in the highlands. Now that illiterates have the right to vote, political parties are showing more interest in courting the rural population, and the Democratic Left has plans for increasing its political activity in the countryside.

Although Assad Bucaram and the Concentration of Popular Forces hold sway in the barrios of Guayaquil, the Democratic Left has made some in-roads, even here.

The Democratic Left is often called a social democrat party, but Sr. Borja prefers the term "democratic socialism," and places the party firmly to the left of centre—a slot which seems genuinely appropriate in the case of the Democratic Left.

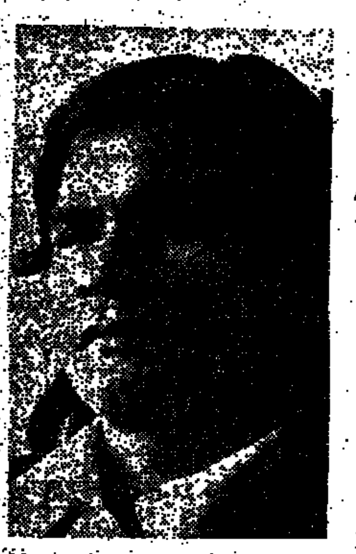
Three months after President Roldós took over, it looked as though the party would join the cabinet, but Sr. Borja says that the leadership of the Democratic Left campaigned for far greater social changes than the Government would accept.

In Congress, the Democratic Left has played a difficult role, caught between the supposed pro-Government Concentration of Popular Forces and right wing groups, often supporting the Government when Sr. Bucaram pushed through legislative projects aimed to embarass the President. Keeping its pedigree clean, the Demócratic Left has so far refused to enter into formal political pacts, and despite the party's readiness to join other groups in persuading the President against a plebiscite, it has stayed clear of the Roldos-Bucaram power struggle.

"Roldós' problem is to fulfil his electoral promises — if he does not live up to people's expectations, that will produce a far more serious crisis," says Sr. Borja.

With the Concentration of Popular Forces badly split, "the wday is open for our ascent," says Sr. Borja. And, at 43, there is plenty of time for several cracks at the presidency.

Miguel Tankamash



MIGUEL TANKAMASH is an authoritative figure, particularly when he wears the feathered head-dress for formal occasions as president of the Shuar Federation.

As representative for 30,000 Shuar Indians, he has spoken in Congress, discussed the group's problems with President Roldos and "done the rounds" of the ministries in Quito, trying to influence Government policy in the Amazon region.

In more relaxed surroundings, Tankamash jokes about the fact that the Shuar are more commonly known as the Jivaro, the "head-shrinkers" of the Amazon jungle, feared by all.

The Shuar are proud of their freedom, of their victories over Inca and Spanish conquerors, and they have always been much admired by other Ecuadorean Indian groups for their prowess in war. "We have never been anyone's slaves," says Señor Tankamash.

But now, the Shuar are showing a different kind of leadership, with the formation of a highly successful, cohesive federation of Shuar centres.

The federation was founded in 1964 and Sr. Tankamash was its first president. Since then, he has served other terms on the committee, and, at 38, he was re-elected to the presidency this year.

Though the Salesian priests, who work in the Shuar area of the south-eastern Ecuadorean Amazon, had a strong influence during the early years of the federation, they have recently faded into the background. At one time, the only schooling avilable to a Shuar was to be a boarder at one of the mission schools, and Sr. Tankamash himself completed his primary courses under the Salesians.

Now the federation runs a bi-lingual (Shua and Spanish) education programme by radio, with 150 primary schools scattered through the jungle areas, in reach of the Shua communities. Illiteracy has been virtually eradicated and this year, several hundred Shuar are starting secondary school by radio, for the first time.

One of the federation's most important tasks, according to Sr. Tankamash, is to legalise the Shuar's landholdings with formal title-deeds.

As more and more colonists move into the Amazon from the highlands, land is becoming more scarce and the Shuar have already had to adapt to a settled form of life, relying on farming more than hunting for their food.

"Now people speak of colonising the Amazon region, as though there weren't ethnic groups already inhabiting the area, with their own cultures and values," says the Shuar president.

Overseas aid

To prove that they make good use of their land, the Shuar have a strong cattle programme, for which they have received aid from European countries. Other federation activities include a health centre in Sucua, its headquarters, and 14 smaller health posts in the communities, as well as local trail making and bridge building.

Señor Tankamash believes the Shuar people must decide their own future, rather than have a foreign culture forced upon them.

"The Shuar should retain their own identity, solve their own problems, and when they show they are able to do this, offer their experience to other groups, he says.

The federation has already become a model to which others, among Ecuador's two and a half million Indians, aspire. hTe Shuar have been instrumental in drawing Indian groups, from the highlands, the coast and the jungle, into closer contact.

Oswaldo Guayasamín

DURING HIS third year at the Quito School of Fine Arts, Oswaldo Guayasamin was expelledm for being "too revolutionary." But the school had to reconsider its decision when the time came to set up the end-of-term exhibition, because there was so little to show without Guayasamin's prolific work.

At 60 years of age, Ecuador's outstanding artist says he is "still a protest painter" and he continues to work as hard as everonly lamenting that life is too short, and the demands on his time are too great.

As the child of an Indian father and a Mestizo mother, he felt the effects of racial discrimination, and says that, even now, many Ecuadoreans ridicule the idea of spending US$20 on paintings "by some wretched Indian." A trip to the United States broadened his horizons and a series of exhibitions in U.S. cities established his reputation—a reputation subsequently reaffirmed by prizese at the São Paulo and Mexico Bienals, as well as numerous shows around the world.

In Mexico, Guayasamin worked on a mural with Orozco and met the Chilean poet Pablo Neruda, forming a friendship that led him to Chile many times. He was there when President Allende assumed power and, after the 1973 coup, expressed his grief for Allende, Neruda and Victor Jara in a painting called "Tears of Blood," an anguished, skeletal face and hands in the series "The Age of Anger."

This series, perhaps more than any other (including "The Path of Tears") expresses the human tragedy and suffering that dominates Guayasamin's painting.

"I spent sevxen years travelling," he says, "I went to all the concentration camps with my camera and sketch book—European painters hadn't shown the suffering and genocide, so I, from another continent, felt that I must paint it."

"This century has been the most tragic period in history. Never before have there been such crimes. The artist is like an antenna — he picks up the sorrow, the happiness, the ambitions and the desires of the people and interprets them."

Although so much of Guayasamin's work reflects human misery — whether in the sombre "Women Crying" or in the oft-repeated theme of tortured hands — he has also painted many portraits and a series of landscapes expessing the blue, green and red moods of volcanic Pichincha mountain, which towers over Quito. He is now finishing an 18-metre-long mural for the Provincial Council's new building, and a huge statue of Ruminahui — an Ecuadorean Indian hero who fought the Spanish conquistodores.

After 6,000 paintings — let alone his drawings, sculpture and other work — he still manages to shut himself away from the demands of friends, enemies (of which he gleefully says there are many), family and followers, to put in a 14-hour day.

Guayassamin has set up a foundation through which he is donating 400 of his own paintings (including nearly all those from "The Age of Anger") to Ecuador — partly because most of his work is outside the country, and partly because he sees this as a politacl obligation.

"I am ahead of the times," he explains. "Maybe, one day, Ecuador will be a socialist country."

He will also bequeath his new house to the foundation. His home is a dramatic white creation, high on the hills above Quito, which, with a superb collection of pre-Colombian ceramics, colonial art and foreign paintings, is, as he proudly points out, "a museum in its own right."

BIS FIGURES

Euromarket tops a trillion

BY PETER MONTAGNON

OIL EXPORTING countries pumped a record amount of money into the U.S. domestic banking system in the final quarter of last year. Despite the Iranian crisis, their deposits at banks in the U.S. rose by $3.6bn, or 34 per cent, the largest quarterly increase ever, according to the Bank for International Settlements.

The increase suggests that the oil producers were generally less perturbed than has been widely believed by the U.S. freeze of Iranian assets last November, all the more so since the total new supply of petro-funds to the world's major banks slowed during the quarter to $13.4bn, from the record $19.6bn in the third quarter.

As oil prices rose last year the oil producers became net depositors in the banks to the tune of $30.1bn, after having been net borrowers of $12.1bn in 1978, the latest BIS figures on international lending show.

This helped to swell the volume of net international bank credit by $130bn last year to a total of $665bn after an expansion of $110bn in 1978.

The BIS defines net international bank credit as the external assets of banks in the Group of Ten industrialised countries together with Switzerland, Austria, Ireland and Denmark and branches of U.S. banks in the main offshore centres, adjusted to exclude double counting of funds re-deposited with other reporting banks.

In gross terms, the assets rose $218.1bn last year to $1,110.9bn in the final quarter with the growth slowing to $69bn from $95bn in the third.

A feature of the fourth quarter was a record increase in borrowing by non-oil developing countries in international markets. Bank lending to this group rose by $12.2bn to $158.8bn. Over half this increase was accounted for by three countries alone: Argentina with gross new borrowings of $2.9bn, and Brazil and Mexico with $1.9bn apiece.

Eastern Europe also maintained a high pace of borrowing, with claims on Poland making up nearly 40 per cent of the $3.1bn increase in credits to these countries. This was largely matched by a $2.8bn increase in deposits by these countries in international banks, with the Soviet Union accounting for 60 per cent of the new funds.

The BIS points out that the final quarter of last year saw the tightening of U.S. monetary policy, informal curbs on international lending by Japanese banks and the confusion in the syndicated loan market following the Iranian asset freeze.

But it says that there is little evidence to show that these events were a serious constraint in the recycling process of surplus oil funds.

For the year as a whole, net bank lending to non-oil developing countries expanded by some $24bn, it says.

Japan's big five steelmakers average a profit gain of 141%

BY MARK MEREDITH IN TOKYO

KAWASAKI STEEL has announced record profits, almost trebled to Y50.1m ($224m) for the financial year to March 31, to help round off a set of reports of huge earnings rises by Japan's five major steel companies.

The 187.4 per cent profit increase by Kawasaki was accompanied by results from Sumitomo Metal Industries showing Y33.9m profit after tax, an increase of 155.5 per cent over the previous year. Kobe Steel announced profits of Y25.6m, up 87.4 per cent.

With the strong annual results from Nippon Steel and Nippon Kokan KK announced earlier, the five steel giants showed a combined profit for the year of Y245.6bn ($1.1bn) or 141 per cent more than the previous year's 101.9bn.

The bulk of the increases came from greater export earnings and with the advantage of a decline in the value of the yen during the year. But the industry achieved increased production despite sluggish international demand, and the five companies have shown the benefits of energy-saving methods of production.

Kawasaki said that its sales rose 19.5 per cent to an all-time high of Y1,147bn ($5.1bn) and that raw steel production increased 4.7 per cent to 12.92m tonnes. The company increased to 61.2 per cent the amount of steel made through the continuous casting system, which greatly cuts fuel costs, as compared with the traditional ingot casting method, in which more re-heating is required.

Exports accounted for 31.6 per cent of total revenue. Like Nippon Steel, Kawasaki increased its dividend payments to Y5 a share from Y4, as did Sumitomo Metal and Kobe. Nippon Kokan, the second largest steelmaker, announced a dividend rise to Y4, from Y3.

Sumitomo reported sales of Y1,224bn, for an increase of 19 per cent. Sizeable increases were reported in the company's speciality production of steel pipes, plates and wires. Exports amounted to Y476.5m, or 38.9 per cent of sales.

Kobe, Japan's fifth largest steelmaker, announced sales of Y1,024bn, an increase of 15.9 per cent. Crude steel production rose 5.1 per cent to 7.6m tonnes. Exports increased 15.7 per cent to Y250.6m.

Kawasaki Steel said that it expected sales and profit before tax and special items in the business year ending next March 31 to be little changed from the Y1,147bn and Y92.55bn respectively, of 1979-80. It foresaw a decline in exports to the U.S. and the Middle East and increased costs resulting from higher oil and raw material prices. It planned, however, to declare an unchanged Y5 dividend for the year.

Sumitomo forecast that its profit before tax and special items in the current year would decline slightly, from a record Y78.91bn in 1979-80, following a rise in interest costs and higher fuel and raw material prices. Sales were expected to be almost unchanged, with domestic demand for high grade steel pipes more than offsetting a decline in exports to the U.S. and Middle East.

Kobe Steel said that it was unable to make a clear business forecast for the year ending next March, but that it expected first-half sales of about Y590bn, compared with Y538.89bn in the second half of last year and Y485.84bn in the first half.

Hitch in Chrysler rescue

By Ian Hargreaves in New York

A THREE-DAY meeting of lenders to the Chrysler Motor Company and Government officials ended at the weekend with 20 banks still holding out against the proposed terms of the Government-led rescue.

Mr. Robert Carswell, Deputy Treasury Secretary, emerged from the meeting to say that the banks involved wielded "considerable influence," but that he believed they would eventually agree to go along with the plan, in time for its proposed completion date of June 13.

If they continued to hold back, the 20 banks "would bear responsibility for the demise of the company and its devastating economic consequences."

The more than 300 banks involved in loans to Chrysler have stated that all lenders must participate in the plan for it to be put into effect.

Several European and American banks are known to be seeking repayment.

Mr. Carswell said the total loan commitments of the rebel bankers was less than $30m out of a total rescue and restructuring package worth $5bn.

PENDING DIVIDENDS

	Date	Announcement last year
*Allied Breweries	June 10	Final 1.937
*Anglo Am. Cpn. of SA	June 5	Final 32 cts.
Arbuthnot Latham	June 21	Final due
*Armitage Shanks	June 4	Final 3.19
Assoc. Brit. Foods	June 11	Sec. int. 1.7
BAT Inds.	June 26	Final due
*BPB Inds.	June 25	Final 9.0
Baker Perkins	June 21	Sec. int. 4.35
Beresford (S. & W.)	June 27	Int. 2.5
Brit. & Com. Shipg.	June 14	Final 5.838
Brown (John)	June 29	Final 10.239
*Chloride	June 12	Final 4.6
Chubb	June 17	Final 3.478
Comp Air	June 13	Int. 1.65
Daily Mail & Gen. Tst.	June 12	Int. 9.366
Dawson Int.	June 18	Final 4.0
*De La Rue	June 3	Final due
Eastern Produce	May 30	Final 3.082
Electronic Rentals	July 5	Final 4.773
*Elliott (B.)	June 25	Final 7.25
*Eng. China Clays	June 19	Int. 2.117
GEC	July 5	Final 4.0
GEI Intl.	June 12	Final 3.028
*Goldfields Group	June 10	Int. 1.53
Granada	June 20	Int. 1.44
Gt. Northern Inv. Tst.	June 18	Int. 1.5
*Great Portland Estates	June 9	Final 4.0
Greene King	July 5	Final 5.0
*Guinness (A.)	June 13	Final 6.519
Guthrie	June 7	Final 15.0
Hambros	June 16	Final 67.24
*Hanson Trust	June 11	Int. 3.327
*Harrisons and Crosfield	June 3	Final 17.53
Hill Samuel	June 12	Final 3.486
IC Gas	July 3	Final 12.0
Intl. Timber	June 13	Final 5.086
Johnson Matthey	June 12	Final 5.9
*Kenning Motor	June 25	Int. 1.75
Lindustries	June 21	Final 8.6
Lond. & Midland Ind.	July 3	Final 4.1
Lonrho	June 29	Int. 2.64
MK Electronic	June 27	Final 8.7
*Marley	June 2	Int. 1.5
*Metal Box	June 11	Final 10.72
*MEPC	June 3	Int. 1.5
News Intnl.	June 25	Int. 3.0
Norcros	June 22	Final 3.18
*Northern Foods	June 12	Int. 1.65
*Pegler-Hattersley	June 5	Final 5.031
Percy Bilton	June 4	Final 4.636
*Pilkington Bros.	June 16	Final 4.6
Plessey	June 26	Final 3.846
Powell Duffryn	June 27	Final 7.1
*Racal Electronics	June 19	Final 5.6
Redland	June 26	Final 4.0
*Reed Int.	June 3	Final 1.244
Renold	June 28	Final 7.55
SGB	July 3	Int. 3.15
Scot. & Newc. Brews.	July 5	Final 2.627
*600 Group	June 11	Final 2.634
*Sketchley	June 3	Final 3.294
Stead and Simpson	June 28	Final 2.05
Tesco Stores	June 20	Final 1.1938
Trusthouse Forte	June 19	Int. 2
Tunnel	June 21	Final 8.5
*Ward (T.W.)	June 3	Int. 2.093
Wedgwood	June 13	Final 2.426
Westland Aircraft	June 13	Int. 1.0
Whitecroft	June 25	Final 5.2
Wilkinson Match	June 21	Final 7.14

* Board meeting intimated. † Rights issue since made. ‡ Tax free. § Scrip issue since made. ¶ Forecast.

RECENT ISSUES

EQUITIES

Issue Price p	Amount Paid Up	Latest Renunc. Date	1980 High	1980 Low	Stock	Closing Price p	+ or -	Div.	Times Covered	Gross Yield	P/E Ratio
85	F.P.	16/6	96	84	Amstrad Cons. Elect.	86		bd3.3	3.0	5.5	6.8
‡‡	F.P.	—	180	135	‡‡Hemerdon Mng. 10c	135					
55	F.P.	20/6	80	74	Home Farm Prods 10p	77		b2.9	2.5	5.4	18.5
‡82	F.P.	27/6	91	81	Oakwood Group	81	-1	b6.5	1.9	11.5	6.2
100	F.P.	27/6	110	94	Peerless	94		b6.3	2.8	9.6	4.7

FIXED INTEREST STOCKS

Issue Price	Amount Paid Up	Latest Renunc. Date	1980 High	1980 Low	Stock	Closing Price	+ or -
‖	Nil	3/6	31pm	11pm	Automated Sec. 8% Cnv. Uns. Ln. '95	21pm	-2
100p	F.P.	13/6	101	98	Edwards (L.G.) 8% Conv. Red. Cum. Pref	100	-1
¶	£10	—	12½	11½	Folkestone & District Water 9½pc Pref '85	12¼	
¶	F.P.	30/5	110¼	95¾	Hong. Cont. Gas 8% Conv. Loan. 1995-2000	106¼	-½
¶	F.P.	9/6	106	100¾	Leigh Interests 10pc Conv. Uns Ln 1994-95	102	-1
¶	F.P.	30/6	102	100¼	Mid Southern 10% Red Prf. 1985	101	-1
¶	N.P.	—	12pm	3pm	NSS Newsagents 12% Cnv. Uns. Ln. 1999-2003	8pm	
¶	F.P.	27/6	104	101	North Brit. Props. 9¼% Cov. Uns. Ln. 1998	101	-1
¶	£10	—	12¾	12	North Surrey Water 10pc Pref. 1985	12¾	
¶	F.P.	9/6	93	91	Norwest Holst 11½% Red Cum Pref 1986	92	

"RIGHTS" OFFERS

Issue Price p	Amount Paid Up	Latest Renunc. Date		1980 High	1980 Low	Stock	Closing price p	+ or -
30	F.P.	1/5	12/6	150	120	Brent Chemicals	150	-5
66	Nil	29/5	4/7	100	80	Clifford's Dairies 'A'	80	-1
18	Nil	30/5	20/6	19½	18	East Rand Cons.	18	
55	Nil	11/6	23/7	9pm	8pm	Elec. [illegible]	8½pm	+½
27	F.P.	16/5	15/6	34	30	First Castle Secs.	36	+1
40	Nil	30/5	20/6	64	44	Hawley Leisure	44	-½
45	F.P.	23/5		70	58	Howard Tenens	62	-5
118	Nil	3/6	16/7	18pm	8pm	Linfood	11pm	+1
60cts	Nil	9/6		39pm	30pm	Pancontinental	39½pm	+15
54	F.P.	9/6	27/6	75	67	Rugby Portland Cement	71	-1
180	F.P.	14/5	27/6	305	194	[illegible]	259	+3
68	F.P.			70	58	United Biscuits	69	
110	F.P.	5/4	15/6	143	123	Watmoughs	135	+2

Renunciation date usually last day for dealing free of stamp duty. b Figures based on prospectus estimate. g Assumed dividend and yield. u Forecast dividend: cover based on previous year's earnings. F Dividend and yield based on prospectus or other official estimates for 1979. Q Gross. T Figures assumed. ‡ Cover allows for conversion of shares not now ranking for dividend or ranking only for restricted dividends. § Placing price to public. pt Pence unless otherwise indicated. ¶ Issued by tender. ‖ Offered to holders of ordinary shares as a "rights." ** Issued by way of capitalisation. §§ Reintroduced. ¶¶ Issued in connection with reorganisation, merger or takeover. ‖‖ Introduction. □ Issued to former preference holders. ■ Allotment letters (or fully-paid). ● Provisional or partly-paid allotment letters. ★ With warrants. †† Unlisted security. ‡‡ Issued as units comprising 2 participating pref. shares and 1 ord. share at 83.50 per unit. † Dealings under special rule.

BASE LENDING RATES

A.B.N. Bank	17 %
Allied Irish Bank	17 %
American Express Bk.	17 %
Amro Bank	17 %
Henry Ansbacher	17 %
A P Bank Ltd.	17 %
■ Arbuthnot Latham	17 %
Associates Cap. Corp.	17 %
Banco de Bilbao	17 %
Bank of Credit & Cmce.	17 %
Bank of Cyprus	17 %
Bank of N.S.W.	17 %
Banque Belge Ltd.	17 %
Banque du Rhone et de la Tamise S.A.	17½%
Barclays Bank	17 %
Bremar Holdings Ltd.	18 %
Brit. Bank of Mid. East	17 %
■ Brown Shipley	17 %
Canada Perm't Trust	18 %
Cayzer Ltd.	17 %
Cedar Holdings	17 %
■ Charterhouse Japhet	17 %
Choulartons	17 %
C. E. Coates	17 %
Consolidated Credits	17 %
Co-operative Bank	*17 %
Corinthian Secs.	17 %
The Cyprus Popular Bk.	17 %
Duncan Lawrie	17 %
Eagil Trust	17 %
E. T. Trust Limited	17 %
First Nat. Fin. Corp.	19½%
First Nat. Secs. Ltd.	19 %
Robert Fraser	17 %
■ Antony Gibbs	17 %
Greyhound Guaranty	17 %
Grindlays Bank	‡17 %
■ Guinness Mahon	17 %
■ Hambros Bank	17 %
■ Hill Samuel	§17 %
C. Hoare & Co.	†17 %
Hongkong & Shanghai	17 %
Industrial Bk. of Scot.	17½%
Keyser Ullmann	17 %
Knowsley & Co. Ltd.	19 %
Langris Trust Ltd.	17 %
Lloyds Bank	17 %
Edward Manson & Co.	18 %
Midland Bank	17 %
■ Samuel Montagu	17 %
■ Morgan Grenfell	17 %
National Westminster	17 %
Norwich General Trust	17 %
P. S. Refson & Co.	17 %
Rossminster	17 %
Ryl. Bk. Canada (Ldn.)	17 %
Schlesinger Limited	17 %
E. S. Schwab	17 %
Security Trust Co. Ltd.	18 %
Standard Chartered	17 %
Trade Dev. Bank	17 %
Trustee Savings Bank	17 %
Twentieth Century Bk.	17 %
United Bank of Kuwait	17 %
Whiteaway Laidlaw	17½%
Williams & Glyn's	17 %
Wintrust Secs. Ltd.	17 %
Yorkshire Bank	17 %

■ Members of the Accepting Houses Committee.
* 7-day deposits 15%, 1-month deposits 15¼%.
† 7-day deposits on sums of £10,000 and under 15%, up to £25,000 15¼% and over £25,000 15½%.
‡ Call deposits over £1,000 15%.
§ Demand deposits 15%.

Public Works Loan Board rates

Effective from May 31

Years	Quota loans repaid by EIP†	Quota loans repaid A‡	Quota loans repaid at maturity§	Non-quota loans A* repaid by EIP†	Non-quota loans A* repaid A‡	Non-quota loans A* repaid at maturity§
Up to 5	14½	14½	14½	15	15	14⅞
Over 5, up to 10	14½	14½	14½	14¾	14¾	14¾
Over 10, up to 15	14¼	14	14	14¼	14¼	14¼
Over 15, up to 25	14¼	14	14	14½	14¼	14¼
Over 25	14	14	14	14¼	14¼	14¼

* Non-quota loans B are 1 per cent higher in each case than non-quota loans A. † Equal instalments of principal. ‡ Repayment by half-yearly annuity (fixed equal half-yearly payments to include principal and interest). § With half-yearly payment of interest only.

CURRENCIES, MONEY and GOLD

Discount houses pause for breath

Discount houses had a comparatively easy time last week after a distinct improvement in short term liquidity levels. It was not so much a rest but more a pause for breath. Houses are currently sitting in the eye of a hurricane. On the one hand they have braved the considerable shortages experienced over the past few months, with tax payments and the Government's heavy gilt sales programme, contributing mainly to the shortage. On the horizon looms the £1bn of Treasury stock still outstanding from Bank of England repurchase agreements. The unwinding of the facility is due in two £500m lumps, both in June, unless the Bank of England decides to postpone the settlement date once again.

This might just happen since the payments are within four hand the Bank may take off some of the pressure by postponing once again the recall of 1 per cent of special deposits, which is due at around the same time. Either way it looks as if the market will be called upon to discharge at least some of its commitments in June.

On the four trading days last week the Bank of England gave a moderate amount of help on Tuesday, but money adequate on Wednesday and Thursday, although on the latter day the surplus was rather slow coming through, and the Bank tidied up by buying a small number of Treasury bills. On Friday the bank actually mopped up a surplus.

So last week was probably the least trying for some months, and although the market has experienced setback after setback for most of this year, perhaps now the path ahead is a little less fraught with danger.

GOLD

	May 30		May 29	
Gold Bullion (fine ounce)				
Close	$534-537	(£227¾-229)	$517-520	(£220¼-221½)
Opening	$527-530	(£225¾-227)	$518-521	(£220-221¼)
Morning fixing	$531.40	(£228.167)	$521.00	(£221.797)
Afternoon fixing	$535.50	(£229.238)	$519.60	(£221.106)
Gold Coins				
Krugerrand	$551-556	(£235-237)	$535-538	(£228-229½)
Mapleleaf	$544-548	(£232-233¾)	$530-535	(£225½-228½)
New Sovereigns	$135-137¼	(£57½-58½)	$132-133	(£56¼-57¼)
King Sovs.	$170-173	(£72½-73¾)	$168-171	(£71½-73½)
Victoria Sovs.	$170-173	(£72½-73¾)	$168-171	(£71½-73½)
French 20s	$146-149		$144-147	
50 pesos Mexico	$655-660		$645-650	
100 Cor. Austria	$515-520		$513-518	
$20 Eagles	$654-658		$646-649	
$10 Eagles	—		—	
$5 Eagles	—		—	

OTHER CURRENCIES

May 30	£	$		£ Note Rates
Argentina Peso	4228-4248	1816-1823	Austria	29.50-29.80
Australia Dollar	2.0440-2.0460	0.8724-0.8728	Belgium	66.80-67.40
Brazil Cruzeiro	116.06-117.06	49.935-50.135	Denmark	12.91-13.00
Finland Markka	8.54-8.56	3.6670-3.6690	France	9.63-9.69
Greek Drachma	100.848-103.190	43.30-43.50	Germany	4.14-4.1750
Hong Kong Dollar	11.44-11.53	4.8930-4.870	Italy	1915-1965
Iran Rial	n/a	n/a	Japan	521-526
Kuwait Dinar(KD)	0.620-0.630	0.265-0.2694	Netherlands	4.54-5750
Luxembourg Frc.	66.50-66.60	28.37-28.39	Norway	11.32-11.41
Malaysia Dollar	5.05-5.06	2.1605-2.1625	Portugal	111-115
New Zealand Dlr.	2.3735-2.3785	1.0134-1.0144	Spain	159.00-166.00
Saudi Arab. Riyal	8.57-8.67	3.329-3.331	Sweden	9.75-9.82
Singapore Dollar	4.985-4.995	2.1305-2.1325	Switzerland	3.86-3.89
Sth. African Rand	1.8357-1.8375	0.7828-0.7835	United States	2.3175-2.3265
U.A.E. Dirham	7.71-7.81	3.7010-3.7025	Yugoslavia	48.00-52.50

Rate given for Argentina is free rate.

THE POUND SPOT AND FORWARD

May 30	Day's Spread	Close	One month	% p.a.	Three months	% p.a.
U.S.	2.3220-2.3625	2.3440-2.3460	1.40-1.30c pm	6.91	4.00-3.90 pm	6.74
Canada	2.6950-2.7400	2.7150-2.7170	1.20-1.10c pm	5.08	3.80-3.65 pm	5.49
Nethlnd.	4.55-4.60	4.57-4.58	2½-1½c pm	5.25	6½-5½ pm	5.14
Belgium	66.40-66.80	66.50-66.60	15-5c pm	1.80	33-23 pm	1.68
Denmark	12.90-12.99	12.94-12.95	1¼-3½ore dis	-2.43	6-7¼ dis	-2.12
Ireland	1.1160-1.1225	1.1200-1.1210	0.04p pm-par	0.21	0.25-0.20 pm	0.80
W. Ger.	4.14-4.18	4.16-4.17	3½-2½pf pm	7.56	7⅞-6⅞ pm	6.96
Portugal	112.90-115.30	115.00-115.20	5c pm-45c dis	-2.09	10-110 dis	-2.09
Spain	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Italy	1,949-1,965	1,964-1,965	[illegible]	[illegible]	[illegible]	[illegible]
Norway	11.33-11.43	11.41½-11.42½	[illegible]	[illegible]	[illegible]	[illegible]
France	[illegible]	[illegible]	[illegible]	4.85	[illegible]	3.72
Sweden	9.75-9.86	9.85-9.86	[illegible]	1.98	[illegible]	1.98
Japan	520-530	522-523	[illegible]	[illegible]	[illegible]	[illegible]
Austria	29.55-29.85	29.60-29.65	20-10gro pm	[illegible]	[illegible]	[illegible]
Switz.	[illegible]	3.88-3.89	[illegible]	[illegible]	[illegible]	[illegible]

Belgian rate is for convertible francs. Financial franc 67.15-67.25. Six-month forward dollar 6.70-6.60c pm, 12-month 9.70-9.55c pm.

THE DOLLAR SPOT AND FORWARD

May 30	Day's Spread	Close	One month	% p.a.	Three months	% p.a.
UK†	2.3220-2.3625	2.3440-2.3460	1.40-1.30c pm	6.91	4.00-3.90 pm	6.74
Ireland†	2.0810-2.0910	2.0890-2.0910	1.25-1.15 pm	6.89	3.95-3.85 pm	7.46
Canada	1.1594-1.1604	1.1594-1.1597	0.23-0.28c dis	-2.64	0.44-0.49dis	-4.81
Nethlnd.	1.9520-1.9635	1.9520-1.9540	0.05-0.15c dis	-0.61	0.40-0.50dis	-0.92
Belgium	28.40-28.625	28.37-28.39	10.00-13.00c dis	-4.86	33.0-36.0dis	-4.86
Denmark	5.5545-5.5680	5.5550-5.5575	3.75-4.25ore dis	-8.64	11¼-12¼dis	-8.64
W. Ger.	1.7690-1.7890	1.7745-1.7755	0.16-0.06pf pm	0.74	0.33-0.23 pm	0.63
Portugal	49.01-49.20	49.01-49.16	30-45c dis	-9.15	75-125 dis	-8.14
Spain	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Italy	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Norway	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
France	4.1250-4.1600	4.1250-4.1300	[illegible]	[illegible]	[illegible]	[illegible]
Sweden	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Japan	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Austria	12.71-12.74	12.71-12.72	[illegible]	[illegible]	[illegible]	[illegible]
Switz.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

† UK and Ireland are quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency.

EURO-CURRENCY INTEREST RATES

The following nominal rates were quoted for London dollar certificates of deposit: one-month 9.40-9.50 per cent; three-months 9.50-9.60 per cent; six-months 9.50-9.60 per cent; one year 9.20-9.40 per cent.

May 30	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	West German Mark	French Franc	Italian Lira	Asian $	Japanese Yen
Short term	[illegible]	[illegible]	12-14	[illegible]	[illegible]	[illegible]	[illegible]	14-16	[illegible]	13-15
7 days' notice	[illegible]	[illegible]	12-14	[illegible]	[illegible]	[illegible]	[illegible]	16-19	[illegible]	13-15
Month	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Three months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Six months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
One year	[illegible]	[illegible]	10-10½	[illegible]	[illegible]	[illegible]	[illegible]	17-18½	[illegible]	10-10½

Long-term Eurodollar two years 10⅛-10⅜ per cent; three years 10⅛-10⅜ per cent; four years 10⅛-10⅜ per cent; five years 10⅛-10⅜ per cent; nominal closing rates. Short-term rates are call for sterling, U.S. dollars, Canadian dollars and Japanese yen; others two days' notice. Asian rates are closing rates in Singapore.

LONDON MONEY RATES

May 30 1980	Sterling Certificate of deposit	Interbank	Local Authority deposits	Local Auth. negotiable bonds	Finance House Deposits	Company Deposits	Discount market deposits	Treasury Bills ♦	Eligible Bank Bills ♦	Fine Trade Bills ♦
Overnight	—	10-17½	—	—	—	16½-16	10-17	—	—	—
2 days notice	—	—	17-17⅛	—	—	—	—	—	—	—
7 days or	—	—	—	—	—	—	—	—	—	—
7 days notice	—	[illegible]	[illegible]	—	—	—	[illegible]	—	—	—
One month	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Two months	[illegible]	[illegible]	—	[illegible]	[illegible]	—	[illegible]	[illegible]	[illegible]	[illegible]
Three months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Six months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	—	—	—	—
Nine months	[illegible]	[illegible]	—	[illegible]	—	—	—	—	—	—
One year	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	—	—	—	—
Two years	—	—	[illegible]	—	—	—	—	—	—	—

Local authority and finance houses seven days' notice, others seven days' fixed. *Long-term local authority mortgage rate nominally three years 14¾-15 per cent; four years 14¾-14⅞ per cent; five years 14¾-14⅞ per cent. ♦Bank bill rates in table are buying rates for prime paper. Buying rates for four-month bank bills 16⅝-16⅞ per cent; four-month trade bills 16¾ per cent.

Approximate selling rates for one-month Treasury bills 15⅞ per cent; two-months 15⅞-15⅝ per cent; three-months 15⅝-15 per cent. Approximate selling rate for one-month bank bills 17⅛-17⅛ per cent; two-months 16⅞ per cent; three-months 16-16⅞ per cent; one-month trade bills 17⅛ per cent; two-months 17⅜ per cent; three-months 17 per cent.

Finance Houses Base Rates (published by the Finance Houses Association) 18 per cent from May 1, 1980. Clearing Bank Deposit Rates for sums at seven days' notice 15 per cent. Clearing Bank Rates for lending 17 per cent. Treasury Bills: Average tender rates of discount 16.0608 per cent.

CURRENCY RATES

May 30	Bank rate %	European Currency Unit	Special Drawing Rights
Sterling	17	0.562811	[illegible]
U.S. $	11	1.31136	[illegible]
Canadian $	[illegible]	1.51978	1.63602
Austria Sch.	6¾	16.7092	17.9639
Belgian F.	14	37.5308	40.5396
Danish K.	13	7.39111	7.93404
D'Mark	7	[illegible]	[illegible]
Guilder	10	2.57692	2.76626
French Fr.	9½	[illegible]	[illegible]
Lira	16½	[illegible]	[illegible]
Yen	9	294.136	316.322
Norwgn. Kr.	9	[illegible]	[illegible]
Spanish Pts.	8	[illegible]	98.9774
Swedish Kr.	10	5.85005	6.02468
Swiss Fr.	3	2.16809	2.24891

LOCAL AUTHORITY BOND TABLE

Authority (telephone number in parentheses)	Annual gross interest	Interest payable	Minimum sum	Life of bond
	%		£	Year
Knowsley (051 548 6555)	14¾	½-year	1,000	1
Redbridge (01-478 3020)	14¼	½-year	200	2-3
Redbridge (01-478 3020)	14¼	½-year	200	5-6

UNIT TRUST SERVICE

OFFSHORE & OVERSEAS—contd.

King & Shaxson Mngrs.
1, Charing Cross, St. Helier, Jersey. (0534) 73741
Valley Hse., St. Peter Port, Grnsy. (0481) 24706
1 Thomas Street, Douglas, I.O.M. (0624) 4856
Gilt Fund (Jersey) [illegible]

Kleinwort Benson Limited [illegible]

Lazard Brothers & Co. (Jersey) Ltd. [illegible]

Lloyds Bk. (C.I.) U/T Mgrs. [illegible]

Lloyds Bank International, Geneva [illegible]

M & G Group [illegible]

Samuel Montagu Ldn. Agts. [illegible]

Midland Bank Tst. Corp. (Jersey) Ltd. [illegible]

Murray, Johnstone (Inv. Adviser) [illegible]

Negit S.A. [illegible]

Negit Ltd. [illegible]

Phoenix International [illegible]

Providence Capitol Life Ass. (C.I.) [illegible]

Quest Fund Mngmt. (Jersey) Ltd. [illegible]

Richmond Life Ass. Ltd. [illegible]

Rothschild Asset Management (C.I.) [illegible]

Rothschild Asset Mgt. (Bermuda) [illegible]

Save & Prosper International [illegible]

Schlesinger International Mngt. Ltd.
41, La Motte St., St. Helier, Jersey. 0534 73588

AIM Investments	57.0	60.0	-1.0	12.08
Far East Fund*	100.0	105.0		
Gilt Fd.	19.8	20.0		13.75
Intl. Fd. (Jersey)	105.0	111.0		3.15
Am Options US$	0.90	0.96	-0.02	8.93
Am Smaller Cos $ US$	[illegible]	1.14	-0.01	
Intl. Fd. (Luxmbrg) US$	[illegible]	15.24	+0.01	

*Next sub. day June 4.

Schroder Life Group [illegible]

J. Henry Schroder Wagg & Co. Ltd. [illegible]

Sentry Assurance International Ltd. [illegible]

Singer & Friedlander Ldn. Agents [illegible]

Standard Chartered Intl. Bd. Fd. [illegible]

Stronghold Management Limited [illegible]

Surinvest (Jersey) Ltd. [illegible]

Surinvest Trust Managers Ltd. [illegible]

TSB Unit Trust Managers (C.I.) Ltd. [illegible]

TSB Gilt Fund Managers (C.I.) Ltd. [illegible]

Nat. Westminster Jersey Fd. Mgrs. Ltd. [illegible]

Tokyo Pacific Holdings N.V. [illegible]

Tokyo Pacific Hldgs. (Seaboard) N.V. [illegible]

Tyndall Group [illegible]

Unilife Assurance (Overseas) Ltd. [illegible]

Union-Investment-Gesellschaft mbH [illegible]

Utd. Intnl. Mngmnt. (C.I.) Ltd. [illegible]

United States Tst. Intl. Adv. Co. [illegible]

S. G. Warburg & Co. Ltd. [illegible]

Warburg Invest. Mngt. Jrsy. Ltd. [illegible]

World Wide Growth Management [illegible]

Wren Commodity Trust [illegible]

FT UNIT TRUST INFORMATION SERVICE

AUTHORISED UNIT TRUSTS

Discretionary Unit Fund Managers
22 Blomfield St., EC2M 7AL. 01-638 4485

Disc. Inc. May 30	190.5	203.2xd	-10.7	6.18

E. F. Winchester Fund Mngt. Ltd.
44, Bloomsbury Square, WC1A 2RA 01-623 8893

Great Winchester	17.9	18.7	----	7.89
Gt. Winchester O'seas	21.0	23.2	----	4.75

Emson & Dudley Tst. Mngmnt. Ltd.
28b Albemarle St., W1. 01-493 3211

Emson Dudley Tst.	68.1	73.2	----	6.80

Equity & Law Un. Tr. M.♥ (a)(b)(c)
Amersham Rd., High Wycombe. 0494 33377

Equity & Law	71.1	74.8	-0.2	5.71

Fidelity International Management Ltd.
62-63, Queen St., London, EC4R 1AD. 01-248 4991

American	23.1	24.4	----	1.00
Fixed Interest	24.7	26.1	-0.1	12.96
Growth & Income	29.0	30.6	-0.1	7.78
Special Sits.	28.5	30.0	-0.1	3.17

James Finlay Unit Trust Mngt. Ltd.
10-14, West Nile Street, Glasgow. 041-204 1321

J. Finlay Internat'l	27.8	29.9	----	2.37
Accum. Units	34.2	36.7	----	2.37
J. Finlay High Income	31.3	33.6	----	10.78
J. Finlay Euro.Fin.	21.0	22.6	----	4.90
Accum. Units	26.3	28.2	----	4.90
J. Finlay Fd.In.Tst.	33.0	35.5	----	5.56
Accum. Units	40.7	43.8	----	5.56

Prices on May 28. Next dealing June 4.

Framlington Unit Mgt. Ltd. (a)
64, London Wall, EC2M 5NQ. 01-628 5181

American May 27	50.2	53.4	----	1.26
Am. T'arpund May 27	49.8	53.2	----	2.00
Capital Tst.	51.0	54.4	-0.2	5.68
(Accum. Units)	51.6	55.2	-0.2	5.68
Extra Income Tnist	46.0	49.0	----	10.99
Income Tst.	34.6	37.0xd	-0.2	9.37
Int. Growth Fd.	42.6	45.4xd	-0.2	2.49
(Accum. Units)	45.4	48.4	----	2.49

Friends' Provdt. Unit Tr. Mgrs.♥
Pixham End, Dorking. 0306 5055

Friends Prov. Units	47.9	51.2xd	-0.2	5.27
Do. Accum.	67.7	72.3	-0.2	5.27

Funds in Court*
Public Trustee, Kingsway, WC2. 01-405 4300

Capital May 15	137.9	119.9xd	----	5.56
Gross Inc. May 15	75.8	78.4	----	11.81
High Yield May 15	[illegible]	[illegible]	----	10.41

MainLife Management Ltd.
St. George's Way, Stevenage. 0438 56101

Growth Units	66.5	70.0	----	5.06

Mayflower Management Co. Ltd.
14-18, Gresham St., EC2V 7AU. 01-606 8099

Income May 19	102.9	108.4	----	9.40
General May 19	68.7	72.4	----	6.75
Intnl. May 19	46.8	49.3	----	3.66

Mercury Fund Managers Ltd.
30, Gresham St., EC2P 2EB. 01-600 4555

Mrc. Gen. May 28	53.2	56.5	----	6.22
Acc. Uts. May 28	74.2	78.9	----	6.22
Mer. Int. May 28	73.0	77.7	----	4.50
Acc. Uts. May 28	82.1	87.3	----	4.50
Merc. Ext. May 29	65.6	68.3	-1.1	6.40
Accm. Units May 29	84.3	87.8	+1.4	6.40

Midland Bank Group
Unit Trust Managers Ltd.♥ (a)
Courtwood House, Silver Street, Head.
Sheffield, S1 3RD. Tel: 0742 79842

Commodity & Gen.	92.5	99.8xd	----	4.61
Do. Accum.	113.6	123.9	----	4.61
Overseas Growth	34.4	37.2xd	+0.1	2.49
Do. Accum.	38.8	41.9	+0.1	2.49
Capital	28.1	30.4	-0.2	4.87
Do. Accum.	32.4	35.1	-0.2	4.87
Income	52.3	56.6	-0.1	7.79
Do. Accum.	66.2	71.6	-0.1	7.79
North American	34.3	37.1xd	-0.2	3.00
Do. Accum.	37.9	41.0	-0.3	3.00
High Yield	54.2	58.5	----	10.58
Do. Accum.	65.3	70.5	----	10.58
Equity Exempt*	114.9	121.3	----	5.78
Do. Accum.*	120.4	127.1	----	5.78
Japan & Pacific	37.3	40.3	+0.4	1.88
Do. Accum.	37.8	40.9	+0.4	1.88

*Prices at May 23. Next dealing May 30.

Minster Fund Managers Ltd.
Minster Hse., Arthur St., EC4R 9BH 01-623 1050

Minster May 12	37.8	39.8	----	7.35
Exempt May 30	92.7	96.7	-1.5	6.95

MLA Unit Trust Mngmnt. Ltd.
Old Queen Street, SW1A 9JG. 01-222 8177

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Continued on previous page

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1M	1N Sth. Africa 9½pc '79-81	93¾	27.3	10.21	15.00
1A	10 Sth. Rhod. 2½pc '65-70	150	3/65	—	—
15Ja	15J Do. 6pc '78-81	162	1/265	—	—

LOANS

Public Board and Ind.

1Ja	1J Agric. Mt. 5pc '59-89	61½	3.12	8.34	12.48
30J	31D Alcan 10½pc '89-94	80	19.11	13.09	14.70
1M	1S Met. Wtr. 3pc 'B'	27½	1.2	11.20	13.23
30J	31D U.S.M.C. 9pc 1982	103	5.11	8.75	—
30J	31D Do. without Warrants	91	5.11	10.40	16.28

LOANS—Continued

Financial

FOREIGN BONDS & RAILS

AMERICANS

CANADIANS

BANKS AND HIRE PURCHASE

Feb.	Aug. Alexanders D. £1	243	28.1	16.0	—	9.4	—
Feb.	Aug. Algemene Fl.100	£62½	28.4	Q25%	1.9	8.1	6.7
Oct.	Apr. Allen Harvey £1	350	10.3	21.5	—	8.8	—
Dec.	June Allied Irish	108	5.11	08.93	—	9.0	—
—	Ansbacher (H.) 5p	14¾	8.76	0.15	—	1.5	—
Dec.	June Arbuthnot L. £1	228	19.11	†10.42	—	6.5	—
July	Jan. Bk. Ireland £1	295	19.11	Q23.51	—	8.0	—
Mar.	Sept. Do. 10pc Conv.	£142	25.2	Q10%	—	f7.0	—
May	Nov. Bk. Leumi $0.1	6	8.30	Q01.4%	—	1.9	—
Aug.	Feb. Bk. Leumi (UK) £1	120	11.2	8.57	—	10.7	—
Jan.	July Bk. N.S.W. $A1	138	28.12	Q16c	♦	6.1	♦
Nov.	May Bank Scotland £1	238	28.4	15.0	5.1	9.0	3.0
A. J. O.	Ja Bankers N.Y. $10	£20⅝	24.3	Q$3.30	—	7.1	—

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Head Office: The Financial Times Limited, Bracken House, 10 Cannon Street, London EC4P 4BY
Telex: Editorial 8954871. Advertisements: 885033. Telegrams: Finantimo, London.
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INDUSTRIALS—Continued

[illegible]

CATERERS

[illegible]

S (Miscel.)

[illegible]

INSURANCE—Continued

[illegible]

LEISURE

[illegible]

MOTORS, AIRCRAFT TRADES

Motors and Cycles

[illegible]

Commercial Vehicles

[illegible]

Components

[illegible]

Garages and Distributors

[illegible]

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[illegible]

PAPER, PRINTING ADVERTISING

[illegible]

PROPERTY

[illegible]

INSURANCE

[illegible]

PROPERTY—Continued

[illegible]

SHIPPING

[illegible]

SHOES AND LEATHER

[illegible]

SOUTH AFRICANS

[illegible]

TEXTILES

[illegible]

TOBACCOS

[illegible]

TRUSTS, FINANCE, LAND

Investment Trusts

[illegible]

INVESTMENT TRUSTS—Cont.

[illegible]

Finance, Land, etc.

[illegible]

FINANCE, LAND—Continued

[illegible]

OIL AND GAS

[illegible]

OVERSEAS TRADERS

[illegible]

RUBBERS AND SISALS

[illegible]

TEAS

India and Bangladesh

[illegible]

Sri Lanka

[illegible]

Africa

[illegible]

MINES

Central Rand

[illegible]

Eastern Rand

[illegible]

Far West Rand

[illegible]

O.F.S.

[illegible]

Finance

[illegible]

Diamond and Platinum

[illegible]

Central African

[illegible]

MINES—Continued

Australian

[illegible]

Tins

[illegible]

Copper

[illegible]

Miscellaneous

[illegible]

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. P/Es are calculated on "net" distribution basis, earnings per share being computed on profit after taxation and unrelieved ACT where applicable; bracketed figures indicate 10 per cent or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution; this compares gross dividend costs to profit after taxation, excluding exceptional profits/losses but including estimated extent of offsettable ACT. Yields are based on middle prices, are gross, adjusted to ACT of 30 per cent and allow for value of declared distribution and rights.

- ● "Tap Stock.
- * Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † *Interim since increased or resumed.*
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Tax-free to non-residents on application.
- ♦ Figures or report awaited.
- †† Unlisted security.
- ‡ Price at time of suspension.
- ¶ Indicated dividend after pending scrip and/or rights issue: cover relates to previous dividends or forecasts.
- ♦ Merger bid or reorganisation in progress.
- ‡ *Not comparable.*
- ♦ Same interim: reduced final and/or reduced earnings indicated.
- § Forecast dividend; cover on earnings updated by latest interim statement.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- ★ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ♥ Excluding a final dividend declaration.
- ★ *Regional price.*
- ‖ No par value.

§§. Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock. a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital; cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Tax free up to 30p in the £. w Yield allows for currency clause. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1979-80. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1980-81. K Figures based on prospectus or other official estimates for 1979-80. M Dividend and yield based on prospectus or other official estimates for 1980. N Dividend and yield based on prospectus or other official estimates for 1979. P Figures based on prospectus or other official estimates for 1978-79. Q Gross. T Figures assumed. Z Dividend total to date.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xR ex capital distribution.

REGIONAL MARKETS

The following is a selection of London quotations of shares previously listed only in regional markets. Prices of Irish issues, most of which are not officially listed in London, are as quoted on the Irish exchange.

Albany Inv. 20p	29	......		**IRISH**	
Bertam	19	......	Conv. 9% '80/82	£88⅞	......
Bdg'wtr. Est. 50p	410	......	Nat. 9¾% 84/89	£76	-⅜
Clover Croft	60	......	Fin. 13% 97/02	£89⅞	......
Craig & Rose £1	£18½	......	Alliance Gas	48	......
Fife Forge	33	......	Arnott	360xd	-10
Finlay Pkg. 5p	18	......	Carroll (P.J.)	50	-2
Graig Ship. £1	£14½	......	Clondalkin	120	......
Higsons Brew	78xd	-2	Concrete Prods	75	......
Holt (Jos) 25p	252	......	Helton (Hldgs.)	36	......
I.O.M. Stm. £1	180	......	Ins. Corp.	285	......
Pearce (C. H.)	195xd	......	Irish Ropes	55	......
Peel Mills	40	......	Jacob	37	......
Sheff. Refrshmt	103	......	T.M.G.	90	+5
Sindall (Wm.)	155	......	Unidare	94	-1

OPTIONS

3-month Call Rates

Industrials		I.C.I.	32	Utd. Drapery	9
A. Brew	8	"Imps"	7	Vickers	14
BOC Intl.	6	I.C.L.	45	Woolworths	6½
B.S.R.	5	Inveresk	5		
Babcock	12	Ladbroke	15	**Property**	
Barclays Bank	30	Legal & Gen.	14	Brit. Land	7
Beecham	13	Lex Service	10	Cap. Counties	9
Blue Circle	25	Lloyds Bank	24	Land Secs.	25
Boots	17	"Lots"	3½	MEPC	17
Bowaters	16	London Brick	6	Peachey	13
B.A.T.	25	Lucas Inds.	20	Samuel Props.	12
Brown (J.)	7	"Mams"	14	Town & City	2
Burton 'A'	22	Mrks. & Spncr	9		
Cadburys	5½	Midland Bank	30	**Oils**	
Courtaulds	8	N.E.I.	5		
Debenhams	8	Nat. West. Bank	32	Brit. Petroleum	38
Distillers	21	P & O Dfd.	9	Burmah Oil	20
Dunlop	5½	Plessey	16	Charterhall	12
Eagle Star	14	Racal Elect.	20	KCA	11
F.N.F.C.	2½	R.H.M.	4½	Premier	12
Gen. Accident	21	Rank Org.	18	Shell	35
Gen. Electric	30	Reed Intnl.	17	Tricentrol	35
Glaxo	40	Sears	3½	Ultramar	50
Grand Met.	12	Tesco	7		
G.U.S. 'A'	30	Thorn	25	**Mines**	
Guardian	23	Trust Houses	14	Charter Cons.	18
G.K.N.	22	Tube Invest.	27	Cons. Gold	52
Hawker Sidd	16	Unilever	40	Lonrho	12
House of Fraser	12	U.D.T.	6	Rio T. Zinc	35

"Recent Issues" and "Rights" Page 32

FINANCIAL TIMES
Monday June 2 1980

Barclays urges interest rates cut

BY DAVID MARSH

FURTHER PRESSURE on the Government for an early cut in interest rates has come from Barclays Bank.

Delaying such a move despite the deceleration of money supply growth and the rise of the pound could lead to a period of unprecedented monetary tightness, the bank warns in its latest financial survey, published this morning.

This would put further upward pressure on the exchange rate, with the pound already *near its highest level for five years.*

There is a clear case for cutting interest rates, Barclays says. The authorities' reluctance to do so meant they were effectively overriding the recent money supply indicators.

The modest increase of 0.3 per *cent in the sterling M3 money* supply in April had brought the growth of this aggregate comfortably with the authorities' target range.

Making allowance for inflation, real money supply had been falling sharply for the past year and the contraction since *the autumn has been of about* 16 per cent. This was similar to the figure recorded during 1974-1975 and indicated that the emerging recession would be of at least comparable severity.

The approach of the Treasury and the Bank of England was based partly on the view that *the monetary slowdown since* last autumn had been due to temporary factors and partly on concern about the implications for monetary growth of the removal of the "corset" controls this month. In both these areas, however, the attitude could prove over-cautious, *Barclays says.*

The third and probably most fundamental factor inhibiting flexibility on interest rates was the recent acceleration of inflation. In particular the authorities seemed to feel that interest rates could not be cut until wage settlements showed signs of *responding to tight monetary* control.

This concern was understandable but it was difficult to see how further tightening could additionally constrain private sector wage settlements, given the now widespread knowledge of industry's severe financial pressures.

Carter warns on Mid-east

BY DAVID BUCHAN IN WASHINGTON

PRESIDENT CARTER has issued a blunt threat to veto in the UN Security Council any West European initiative on Palestinian self-determination which would undermine the U.S.' peace mediation based on the 1978 Camp David accords.

But he coupled his warning, made in a television interview broadcast yesterday, with the hope that such a clash could be avoided.

He predicted the Europeans would not act "for the next couple of weeks," until they all met at the Western summit in Venice. Before that the U.S. would get the stalled Israeli-Egyptian talks moving again.

M. Jean Francois-Poncet, the French Foreign Minister, said after meeting his U.S. counterpart, Mr. Edmund Muskie, in Washington last week, that the European Community countries were still considering a Mid-East initiative.

If this materialised, it would probably supplement UN Resolution 242 to deal with Palestinian political rights. Any such move would involve Britain which, along with France, is a permanent member of the Security Council.

Mr. Carter said the U.S. would block anything which tampered with "the sanctity of and the present form of UN Resolution 242."

Thes U.S. strategy has been to build on the resolution's helpfully vague language the detailed edifice of its Camp David agreements.

Mr. Carter said the Palestinian autonomy talks were down to the "nitty gritty" and the issues clearly defined. "*Without very much more* delay, we will be back at the negotiating table."

The President's unusually strongly-worded statement may contain an element of electioneering, addressed to the Jewish vote. But it is also a sign that the U.S. takes seriously the frustration in Europe, which has no role in the peace talks but has a great stake in Middle East stability and oil security.

John Wyles writes from Brussels: Mr. Carter's warning will be seen in several European capitals as unnecessary jumping at shadows.

There have been a lot of second thoughts in London, Paris and Bonn since Mr. Muskie made U.S. opposition to any European move which *might cut across the* Camp David process abundantly clear during his talks with NATO governments three weeks ago.

Previously, Lord Carrington, UK Foreign Secretary, and one of the prime movers behind the EEC discussions, had not ruled out an initiative which went against American wishes. But in the last few days the Foreign Office has been talking about the overwhelming need "to carry our allies with us" in launching any attempt to break the Middle East deadlock.

Britain and West Germany are reluctantly coming to the conclusion that the EEC will largely have to stay its hand until after the American presidential elections.

The EEC's obvious reluctance to confront the U.S. partly *reflects a desire to avoid causing* any more fractures to an Atlantic alliance whose cohesion on Afghanistan, Iranian sanctions and the Olympic Games boycott has been much less than complete.

David Lennon writes from Tel Aviv: Israel has welcomed President Carter's declaration. Mr. Yitzhak Shamir, the Foreign Minister, said last week that any European initiative could torpedo the entire peace process.

World pay 'matching inflation'

BY DAVID MARSH

PAY INCREASES are keeping up with or even exceeding inflation in most industrialised countries apart from the U.S. and Canada, says the Paris-based Organisation for Economic Co-operation and Development.

This contrasts with statements during the last fortnight by Sir Geoffrey Howe, the Chancellor, that Britain is almost the only industrialised nation where wages are still rising in line with consumer prices.

Pay rises in excess of the inflation rate in other countries have, however, largely been the result of productivity gains. They have been much lower than after the last major increase in oil prices in 1973-74.

Average earnings in the UK have been growing faster than inflation for most of the last two years. Since output has been stagnant this has been a key factor behind the recent acceleration in the annual rate of retail price inflation to nearly 22 per cent, the highest in the industrialised world.

In speeches and interviews emphasising wage restraint, Sir Geoffrey has been developing the theme that workers in most other industrialised countries are accepting cuts in real incomes in this year's wage bargaining.

He told the Commons last month: "We are almost the only industrial country that has not accepted a rate of pay increases several percentage points below the rate of price increases."

However, the OECD figures show that experience differs sharply between countries. These figures show that wages in real terms—allowing for inflation—are growing at a rate of *up to 2 per cent to 3 per cent* a year in the OECD area's best performing economies, West Germany and Japan.

In most Continental countries wages are either keeping pace with inflation or are keeping ahead of price rises by up to 1 per cent.

Real wage cuts have been accepted in Switzerland and the Netherlands, as well as in the U.S. and Canada.

In the U.S., where consumer prices are growing at an annual rate of about 14 per cent but manufacturing wages by only 7 to 8 per cent, there have been real cuts in wages of 6 to 7 per cent on the basis of what is largely regarded as a misleading price index.

The OECD suggests that a more accurate figure for the real wage reduction in the U.S. *would be 2 to 3 per cent allowing* for over weighting of housing costs in the U.S. consumer price index.

The large fall in real wages in the U.S., and the importance of the American economy in total OECD output, has depressed the weighted average of manufacturing earnings in the whole of the 24-nation OECD. This is running at about 10 per cent above a year ago compared with the average annual increase in OECD consumer prices of 13 per cent.

This figure has been quoted by Sir Geoffrey as showing that in the whole OECD area earnings are running at 3 per cent, on average, below prices.

Former civil servant attacks monetary curbs

BY JOHN ELLIOTT, INDUSTRIAL EDITOR

A WARNING that the Government's monetary policies are unlikely to have a rapid enough impact on wage bargaining was issued yesterday by Sir Denis Barnes, a former Permanent Secretary at the Department of Employment who was at the centre of Government policy-making during the trade union confrontations of the late 1960s and early 1970s.

"It is very doubtful whether collective bargaining will respond quickly, and the damaging conflict (of the past decade) between trade union power and Government policy is likely to continue," says Sir Denis in a book published yesterday.

"On the face of this it is questionable for how long the present Government's policy can be sustained. The social and economic consequences may be judged unacceptable before it is effective in controlling inflation. If so, the Government may be unable to evade the problem which has faced its predecessors and may feel compelled to influence or interfere with collective bargaining."

These views, which will be privately supported by several current senior civil servants, reflect several years of frustration at the Department of Employment, where Sir Denis was permanent Secretary from 1968 to 1973. He later became the first chairman of the Manpower Services Commission till 1976, when he retired.

His book, written jointly with Eileen Reid, a researcher at his Policy Studies Institute, is for the most part extremely restrained and discreet. It is at its most critical when dealing with Mr. Edward Heath's period as Prime Minister.

"I was generally surprised by *the degree of governments'* failures to get on with trade unions; but I was most surprised by Heath's misunderstanding of what could be achieved and his belief that he could do deals with the unions," Sir Denis said yesterday.

He sees no change in the basic industrial conflicts, in spite of differing economic circumstances, and warns: "It seems unlikely that the present Government (or a successor Labour Government) will be any more successful in dealing with the trade union problem than the Governments of Heath, Wilson or Callaghan."

Governments and Trade Unions. The British Experience 1964-79. By Denis Barnes and Eileen Reid. Policy Studies Institute and Heinemann Educational Books. £12.50.

UK woos Nippon Electric

By Ray Perman, Scottish Correspondent

STRENUOUS EFFORTS will be made over the next two months to secure a £20m microchip investment by the Japanese electronics group Nippon Electric for the UK.

The company has been looking for a European manufacturing base for more than a year and will make the final choice at the end of July between the Irish Republic—where it already has a small factory near Dublin—and Livingston New Town in Scotland.

The company has received its final offer from the Irish Industrial Development Authority, which is believed to be prepared to pay about 45 per cent *of the start-up costs of the venture*, which will build up to employ 600 people after 3½ years.

Under EEC competition guidelines, the UK Department of Industry could probably match this figure in regional development, selective assistance and training grants, but it is believed to have offered only between 30 and 35 per cent.

The Scottish Development Agency and the Scottish Economic Planning Department would dearly like to see Nippon Electric come to Scotland to augment the two U.S. companies already making microchips there, Motorola and National Semiconductor.

A joint delegation from the two bodies is likely to travel to Japan to see Nippon Electric shortly to try to persuade the company that Scotland has advantages in infrastructure and *the availability of trained* labour that outweigh the financial advantages of going to the Irish Republic.

They will be showing Nippon Electric a tax model prepared by the Scottish Development Agency for the Commons Select Committee on Scottish Affairs, which is *investigating industrial* incentives.

Based on an electronics investment similar in size and character to that proposed by Nippon Electric, it shows that, by taking advantage of stock relief and capital allowances, a new company need not pay corporation tax for four to five years.

Labour moderates' hopes revive

BY RICHARD EVANS, LOBBY EDITOR

SOME Labour Party leaders, intensely relieved that the special one-day conference on Saturday was not more openly divisive, believed yesterday it could even have signalled a turning point in the fightback for control of the party by the moderate wing.

On the surface the Wembley conference appeared to have been another significant step by the Left in its campaign for a more socialist programme, with the overwhelming acceptance by over 5m card votes to 6,000 of a Left-oriented policy statement.

But moderate leaders, including Mr. James Callaghan, the party leader, found more significant the signs of increased concern, particularly among trades union leaders, at the deep divisions apparent within the party, and confirmation that the Left is likely to have its major constitutional proposals *rejected at the autumn conference.*

This would mean that the leadership and the Parliamentary party would retain the right to draft the manifesto, and it is on this issue that the key battle will be fought. The Left will demand that the manifesto should be based on *conference decisions and drafted by the* National Executive Committee. They now regard the Wembley document as party policy as it was accepted by the necessary two-thirds majority.

Mr. Callaghan, who yesterday described the conference as well worth while, adopted the tactic of virtually ignoring all the unacceptable parts of the policy statement, leaving himself with maximum freedom of action.

In contrast to the polite but *cool reception given to* Mr. Callaghan—who gave no indication of whether he intends to retire from the leadership in the autumn—Mr. Anthony Wedgwood Benn was given a rapturous standing ovation when he wound up the conference.

Mr. Benn made clear that acceptance of *the policy statement* would involve more public ownership of industry, renationalisation without compensation of assets sold by the Conservatives, the repeal of the Employment Bill now before Parliament, anti-Common Market legislation and the abolition of the Lords.

Conference reports, Page 6;
Politics today, Page 18

New pressure on Cossiga to go

BY RUPERT CORNWELL IN ROME

SIG. FRANCESCO COSSIGA, the Italian Prime Minister, is under *increasing pressure to* resign over allegations that he helped a fellow Christian Democrat's son to escape arrest on terrorist charges.

It was clear last night that an 11-9 vote by a Parliamentary committee of inquiry absolving the Prime Minister of blame *had nothing to still* the uproar caused by suggestions that Sig. Cossiga had aided the flight of Marco Donat-Cattin, son of Sig. Carlo Donat-Cattin, one of Italy's most influential politicians.

Sig. Donat-Cattin resigned from his post as Vice-President of the Christian Democrats late on Saturday night, shortly after the committee had absolved both himself and the Prime Minister.

But his gesture appears to have come too late to close an episode which has not only cast a shadow over the forthcoming regional elections next Sunday, but could lead to an early collapse of the Government.

It has also clouded Italy's *increasingly successful campaign* against terrorism, and poisoned relations between Christian Democrats and Communists to a degree not seen for years.

With its decision, the committee cleared Sig. Cossiga of allegations that, on the basis of *his knowledge* of top secret police documents, he had tipped off Sig. Donat-Cattin that his son was being sought by investigating magistrates as a leader of the Prima Linea (Front Line) ultra-left terrorist group.

The accusations were contained in a confession made to Turin magistrates by a captured and self-confessed Prima Linea terrorist, Roberto *Sandelo. The Sandelo family* are friends of the Donat-Cattins. According to Sandelo's confession, Sig. Donat-Cattin got word to his son—with whom he is said to have had no previous contact for two years—that the police were after him.

But the committee split *exactly on party lines in its verdict* and the majority for acquittal fell far short of the four-fifths (or 16-4) decision needed for the case to be shelved for good.

Instead, it could be reopened and brought before both houses of the Italian Parliament if a minimum of one-third (or 318) of deputies and senators so request.

The Communists, who have 285 deputies and senators, have left little doubt that they intend to press for further elucidation. They have been joined by independent *Left-wingers* and the radicals, as well as by the extreme Right wing MSI, thus already ensuring a majority for re-examining the case.

At this point, it is being widely forecast, Sig. Cossiga would probably feel obliged to resign, so precipitating another Government crisis of uncertain outcome.

THE LEX COLUMN

Demergers: U.S. experience

In the UK, demergers are just a gleam in the eye of jaded entrepreneurs. The Government has still to disclose what changes it proposes to make in the Finance Bill to reduce the tax bias against splitting up a *business. In the U.S., however,* some useful case histories are already being written.

Take IU International, for instance, which late last year spun off its shipowning business to its shareholders as an independent public company. The new company now trade at around $6, and IU's own share price does not seem to have been adjusted down to reflect the disposal. So much for the efficient-market theorists.

IU is now going one step further with a cunning scheme to sell its 58.1 per cent shareholding in Canadian Utilities to Atco, a Canadian industrial housing and resources business. As the first step in this transaction, Atco has made a tender offer to all IU shareholders for up to 16.2m of their shares at $17 each. If that succeeds, it will then hand these shares over *to IU (which will pop them into* its treasury) in exchange for the stake in Canadian Utilities. The short term impact on IU's earnings per share is spectacular: on a pro forma basis, last year's fully diluted figure would have been about two-fifths higher after adjusting for the *sale. IU's shares have risen a* third to $16½ in the last few weeks.

Ambitious

Meanwhile over in Culver City, shareholders in MGM approved on Friday a plan to split the group into two separately quoted parts—MGM Grand Hotels and Metro-Goldwyn-Mayer Film Co. During the past six years, MGM has built up its hotel and gaming activities, which now account for over half its income, and has cut back film production to only a handful of movies a year.

But it now wants to step up production again, and is giving "serious consideration" to the idea of returning to the distribution business. Setting up an independent film company will, it thinks, make it easier to attract key personnel with juicy *stock options* related solely to the success of their own efforts. Both sides of the existing business have ambitious expansion plans: after the split, each side will be able to make its own financing decisions irrespective of the requirements of the other, and MGM stockholders can make up their own minds about which side of the business to back. Their existing shares have certainly performed a lot better than the market averages since the plan was foreshadowed last November.

The demerger buffs are not having it all their own way, *however.* W. R. Grace caused a stir last autumn with an announcement that it was looking into the possibility of *splitting* itself up. But the idea was not mentioned in the recent annual report, and although any final decision is still a long way off, the chance of Grace being broken up into half a dozen different companies now seems less than it did a few months ago.

One problem which would arise with such a split would be about how to allocate and refinance the large lines of attractively cheap debt which *are now secured on the holding* company. There is also concern about possible personnel problems—Grace has a big central staff in New York, and does not think that all its employees would be happy to work for a smaller business.

Frustration

The idea of a split seems to have stemmed largely from management's frustration with the stock market, and Grace would only contemplate a radical upheaval if it could be confident that the result would be a substantial rise—say 50 per cent—in the share price.

Rather than going the full way, Grace might consider the idea of permitting a public minority in its natural resources division. This would give welcome visibility to a business which contributed about a third of first-quarter earnings and which, Grace hints coyly, might now be worth not all that much less than the $1.7bn capitalisation of the entire group.

Tin spin-off

While the issue of £2¼m worth of shares in South West Consolidated Minerals, a subsidiary of Dundonian, provide pickings for the stags, the longer-term outlook is less clear. Cornish mining is more fraught with complications than is oil production and the exploration work undertaken up to now has reached only a preliminary stage. Even if the results are positive there may be major headaches in obtaining full planning permission for three new mines.

The parent company, Dundonian, has spent £1m so far on exploration and the capital raised should prove sufficient to complete the feasibility work. Perhaps it is a gesture of confidence that Dundonian, which will have contributed only 20 per cent of the costs, is holding on to three-quarters of the equity. By comparison, when Berkeley Exploration was floated off in February, RCA retained only 30 per cent of the shares.

Dundonian's large holding could prove a constraint if it comes to a go-ahead in two years' time, when another £12m or so of capital expenditure would be required. Even with the acquisition of Algrey Developments, Dundonian has a net worth of only £7.2m, making a rights issue by South West of any size unlikely. Amax's loose link with the company may prove a key factor at that stage and the dilution could be substantial.

Weather

UK TODAY

RAIN spreading from W.

London, S.E. and E. England, Midlands
Cloudy, light rain. Max 17-18C (63-64F).

Channel Isles, S. and S.W. England, S. Wales
Rain, hill and coastal fog. Max. 16-17C (61-63F).

N. Wales, I. of Man, N. Ireland
Rain, hill and coastal fog. Max. 14-15C (57-59F).

N.W. England, Lakes, S.W. and N.W. Scotland, Glasgow, Cen. Highlands, Argyll
Starting dry, rain and hill fog later. Max. 14-15C (57-59F).

Cent. N. and N.E. England, Borders, Edinburgh, Dundee
Cloudy. Max 15-16C (59-61F).

Rest of Scotland, Orkney, Shetland
Mostly bright, perhaps rain later. Max. 12-14C (54-57F).

Outlook: Rain; dry periods in S.E. England.

WORLDWIDE

		Y'day midday °C	°F			Y'day midday °C	°F
Ajaccio	F	19	66	Jersey	S	14	57
Algiers	S	24	75	L. Plms.	F	22	72
Amsdm.	F	17	63	Lisbon	S	24	75
Athens	S	24	75	Locarno	R	12	54
Barclna.	F	19	66	London	C	14	57
Beirut	S	31	88	Luxmbg.	C	9	48
Belfast	C	15	59	Luxor	S	46	115
Belgrd.	F	18	64	Madrid	S	25	77
Berlin	F	19	66	Majorca	S	23	73
Biarritz	C	16	61	Malaga	S	23	73
Bmghm.	F	15	59	Malta	S	21	70
Blackpl.	S	13	55	Milan	S	20	68
Bordx.	C	17	63	Moscow	S	26	79
Boulgn.	S	12	54	Munich	F	17	63
Bristol	F	16	61	Naples	F	19	66
Brussels	R	12	54	Nwcstl.	C	15	59
Budpst.	F	18	64	Nice	S	18	64
Cardiff	S	14	57	Nicosia	F	30	86
Cas'b'ca	C	20	68	Oporto	S	18	64
Cologne	C	11	52	Oslo	C	15	59
Cpnhgn.	S	15	59	Paris	C	13	55
Corfu	S	20	68	Prague	C	17	63
Dublin	F	15	59	Reykjvk.	C	12	54
Dbrvnk.	F	15	59	Rhodes	S	21	70
Edinbgh.	F	15	59	Rome	F	21	70
Faro	S	25	77	Salzbrg.	R	11	52
Florence	C	20	68	Stckhm.	C	13	55
Frankft.	S	14	57	Strasbg.	C	12	54
Funchal	C	23	73	Tangier	S	23	73
Geneva	R	10	50	Tel Aviv	S	26	78
Gibrltr	F	23	73	Tenerife	S	21	70
Glasgow	F	17	63	Tunis	S	25	77
G'rnsey	S	15	59	Valencia	S	25	77
Helsinki	F	20	68	Venice	C	15	59
Innsbrk.	F	16	61	Vienna	C	17	63
Invrnss.	F	13	55	Warsaw	F	11	52
I.o.Man	S	13	55	Zurich	C	12	54
Istanbul	S	24	75				

C—Cloudy F—Fair Fg—Fog R—Rain S—Sunny Sl—Sleet Sn—Snow

Registered at the Post Office. Printed by St. Clement's Press for and published by the Financial Times Ltd., Bracken House, Cannon Street, London, EC4P 4BY.